

FIG. 1

FIG. 2B

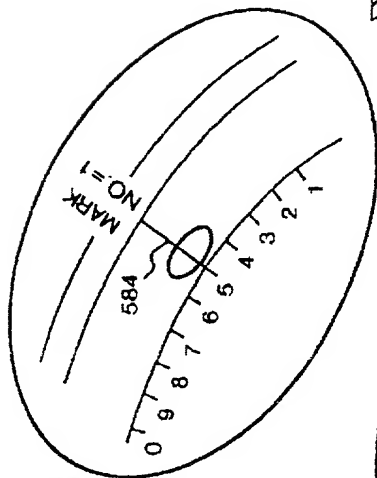


FIG. 2C

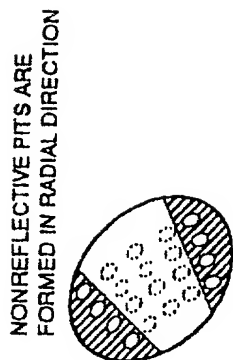


FIG. 2A

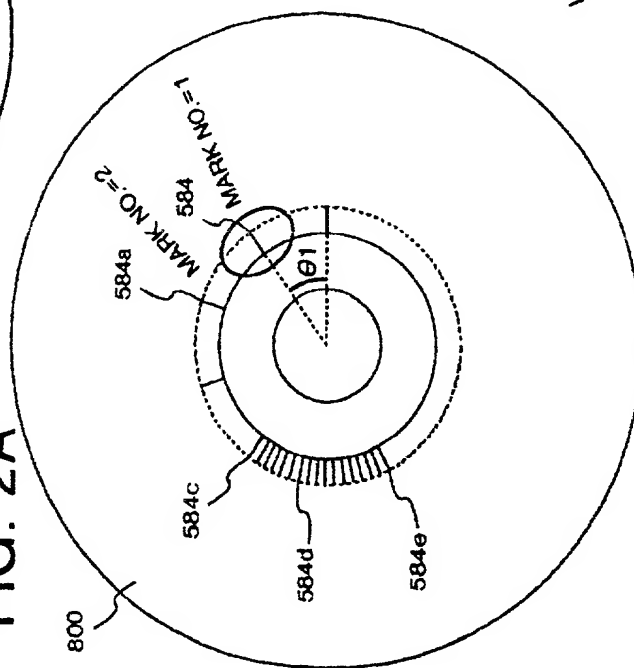


FIG. 2D

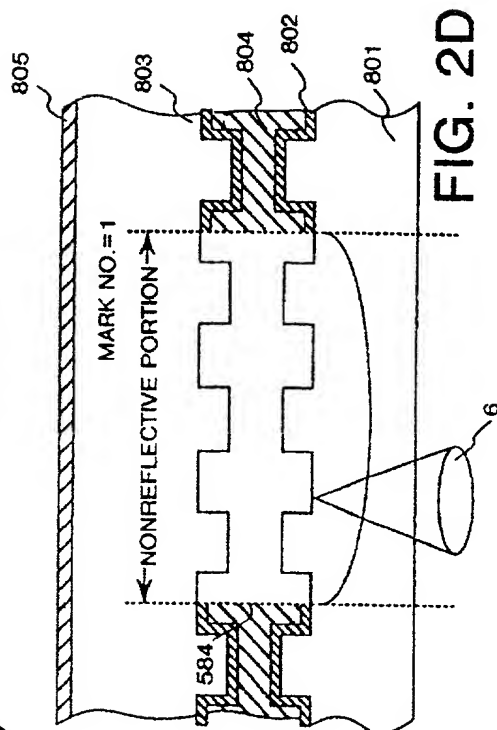
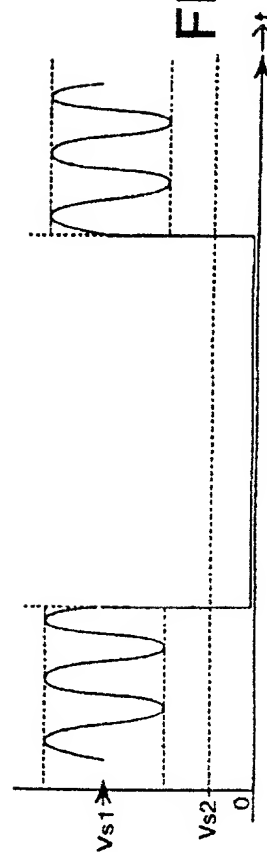


FIG. 2E



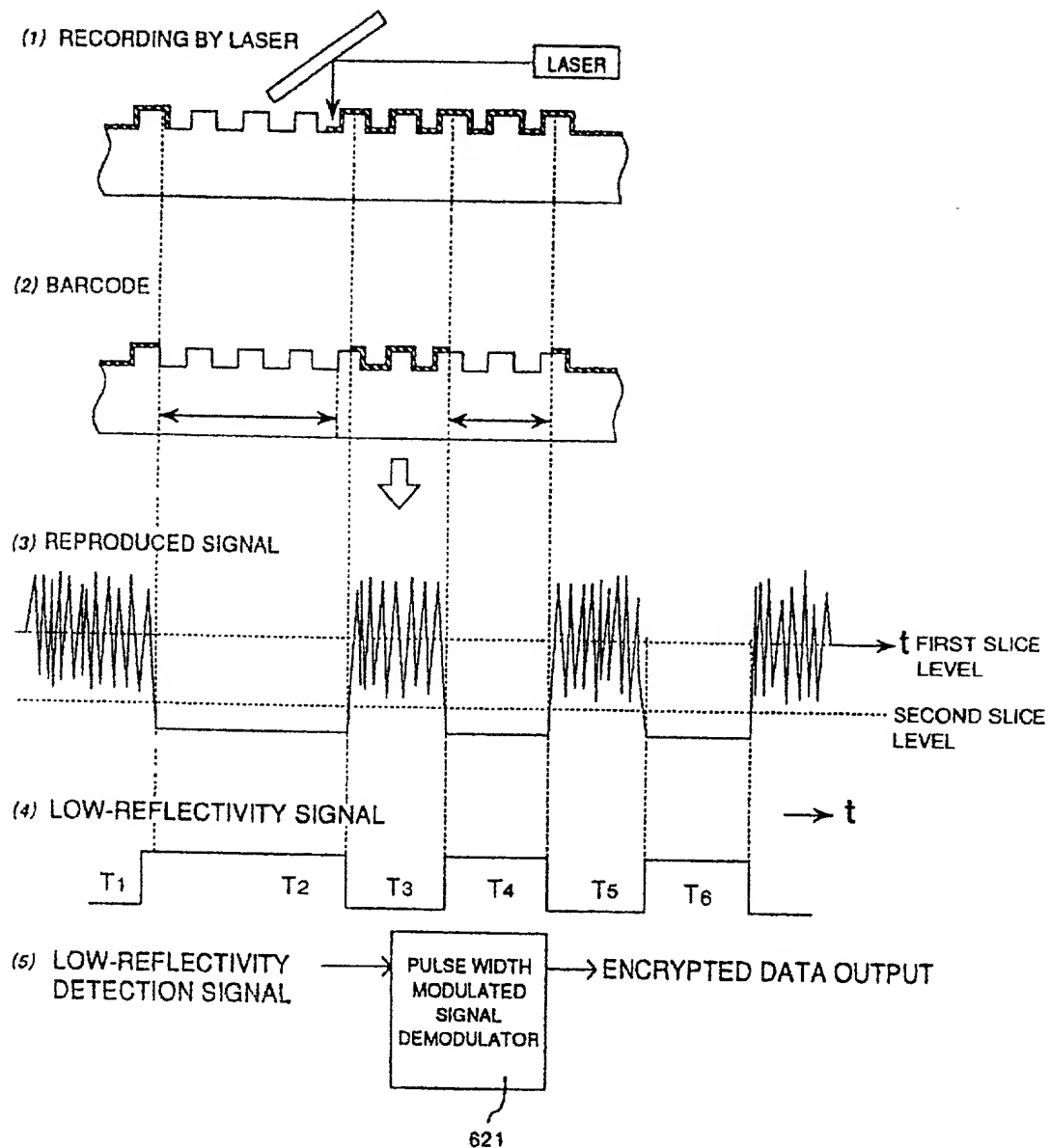


FIG. 3

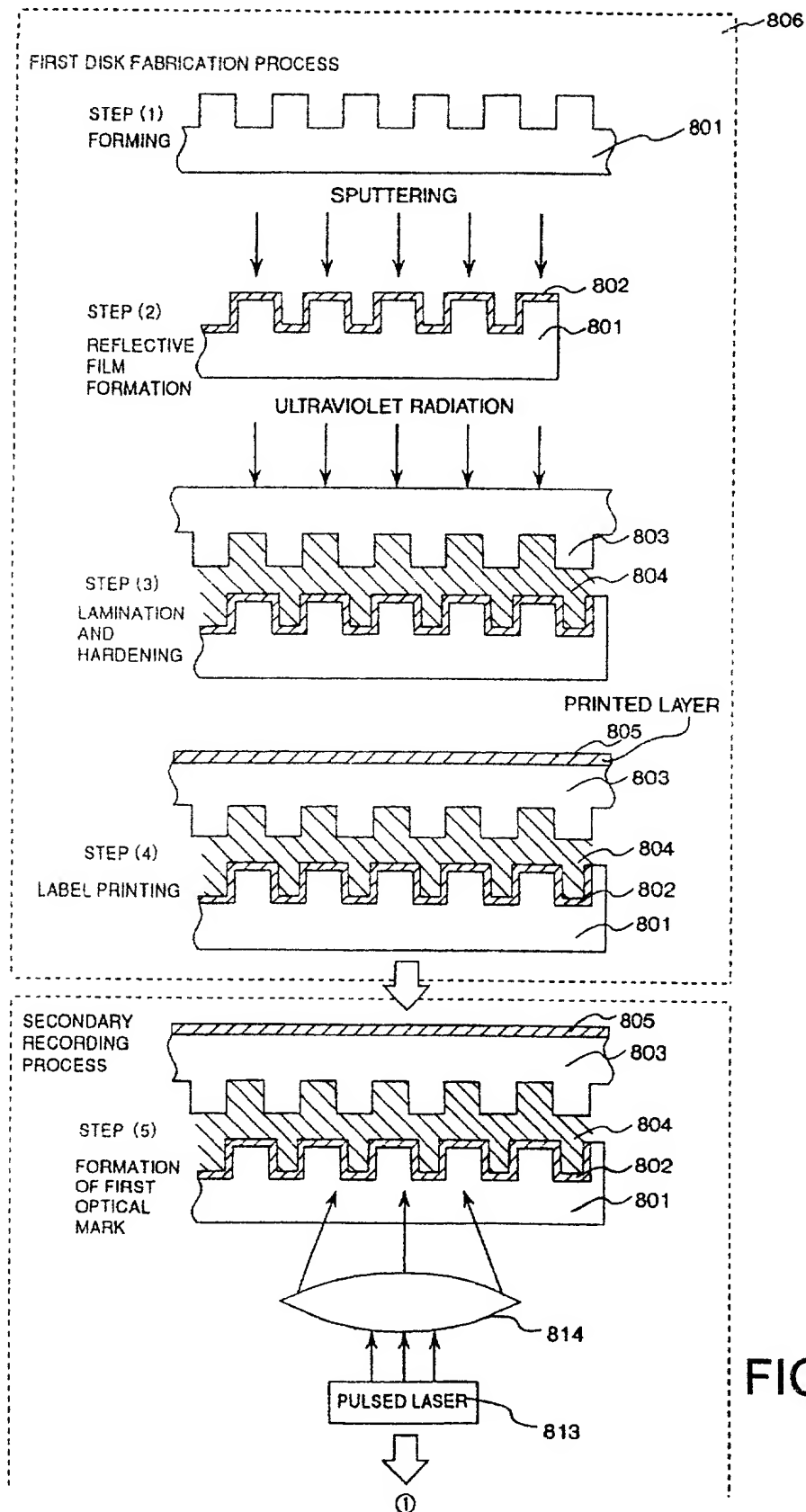
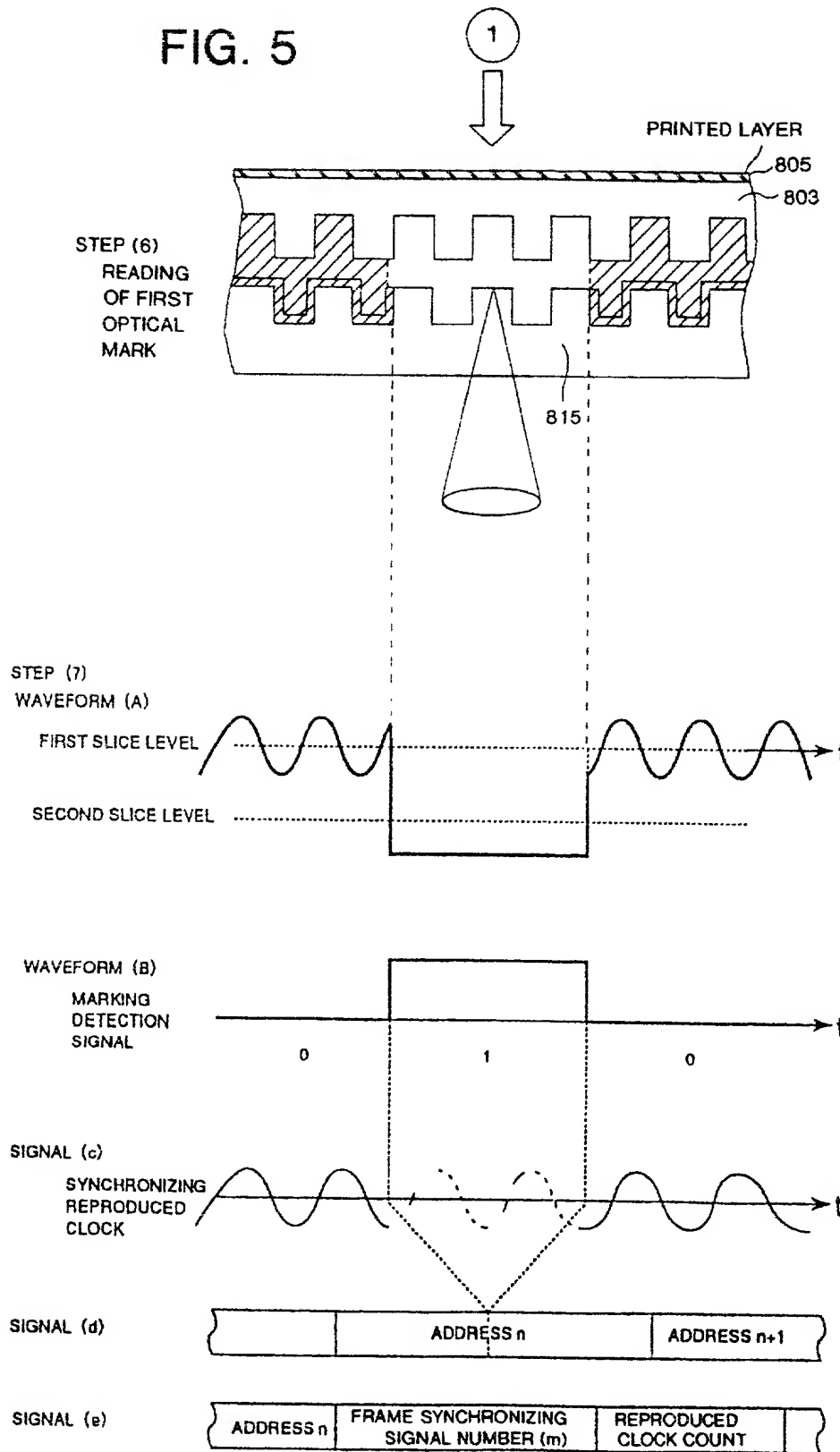
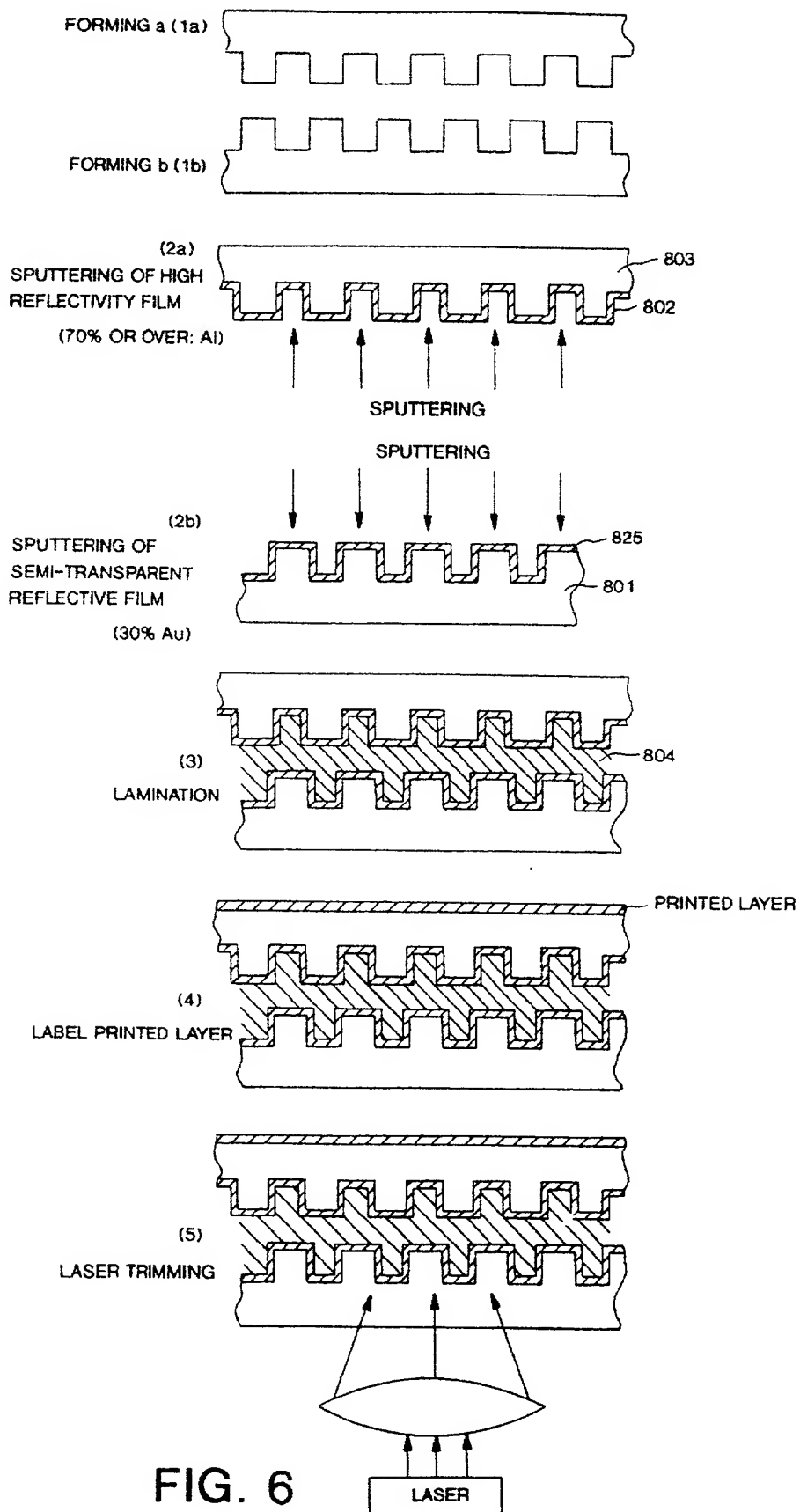


FIG. 4

FIG. 5





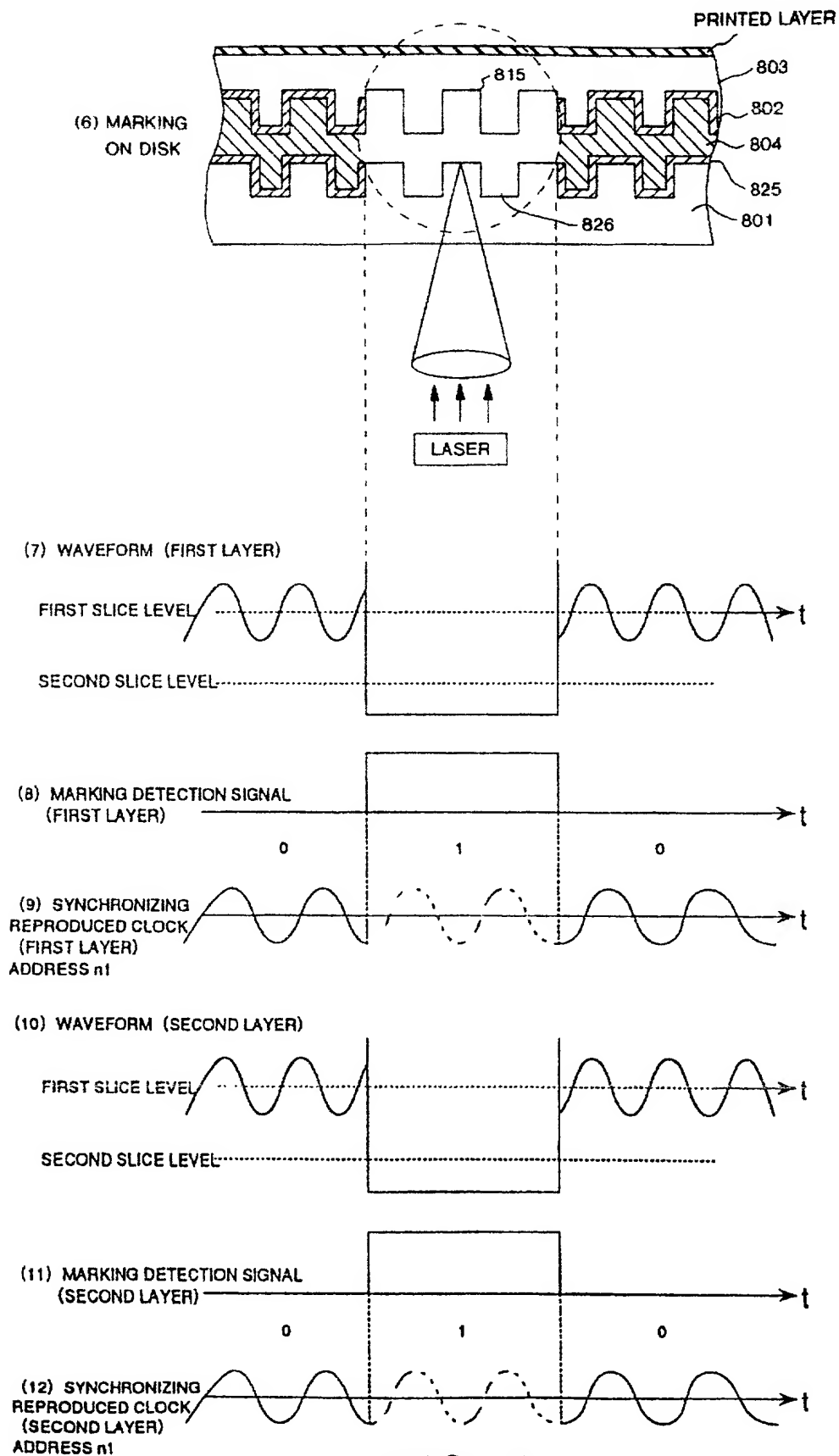


FIG. 7

104095-1001

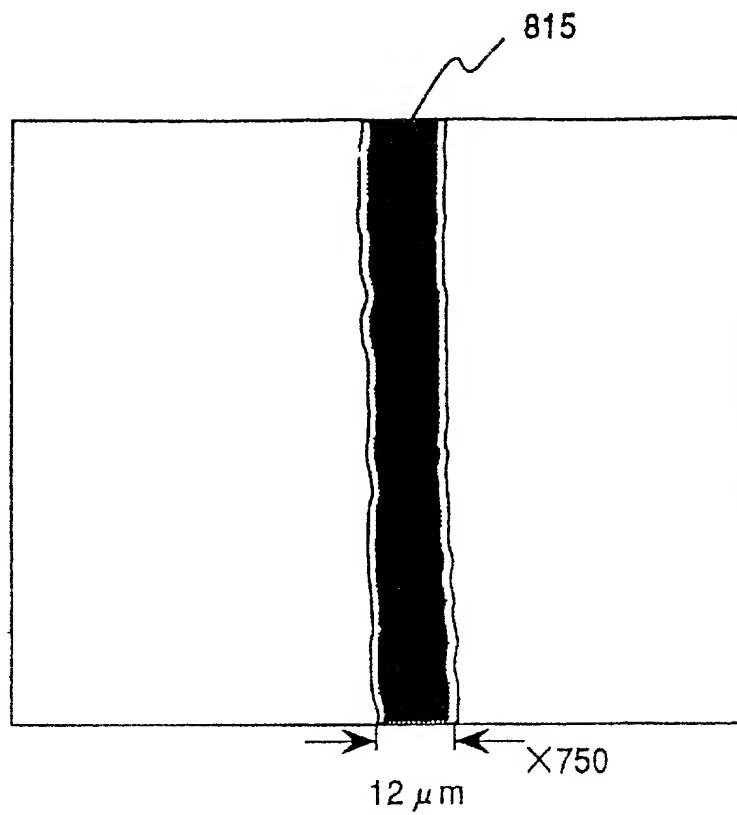


FIG. 8A

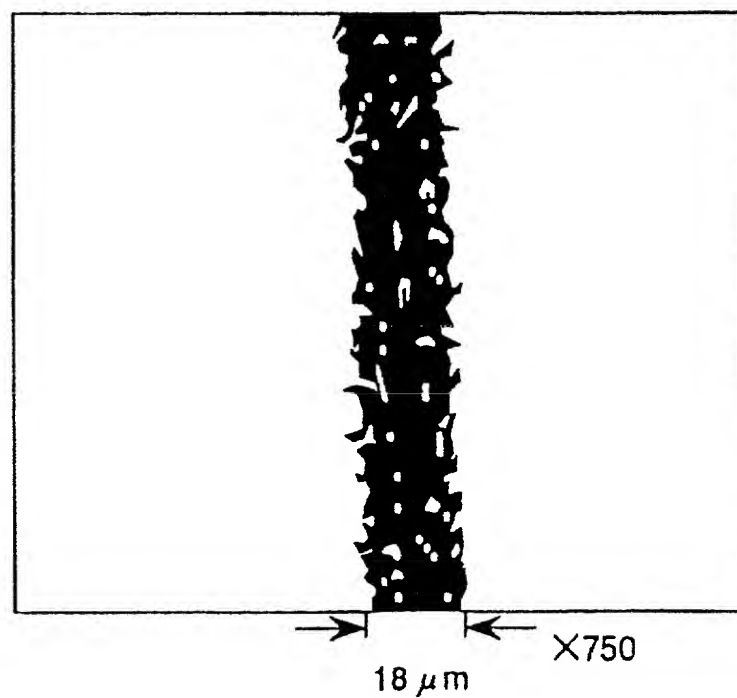
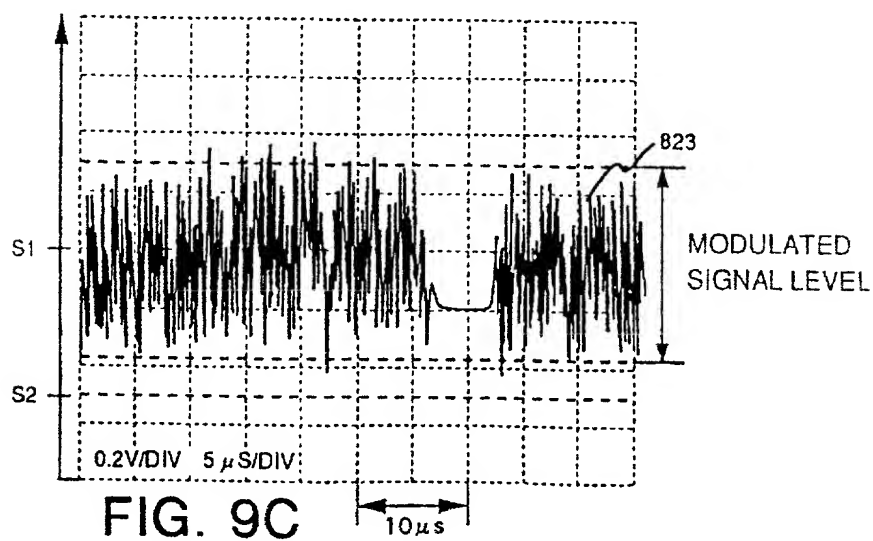
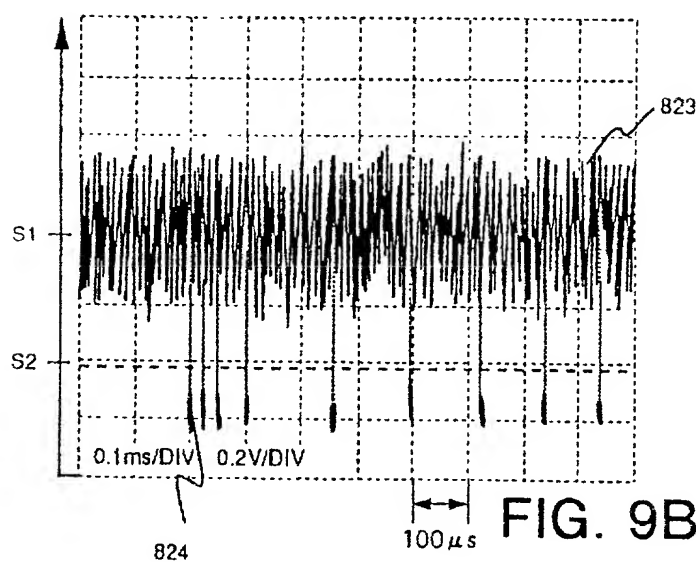
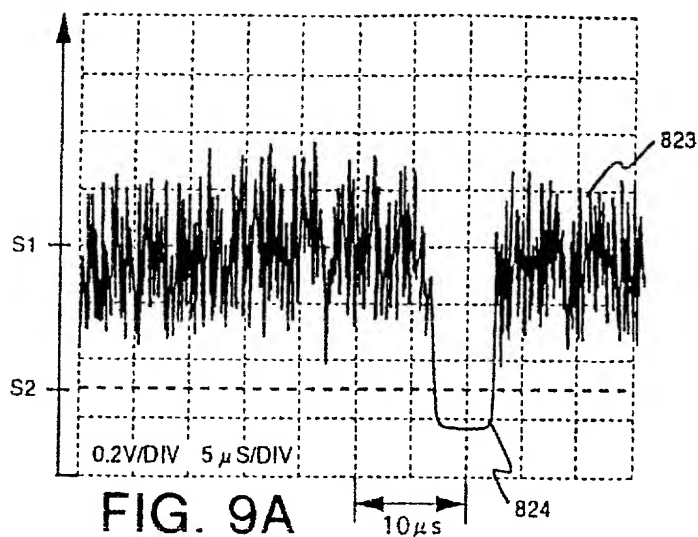


FIG. 8B



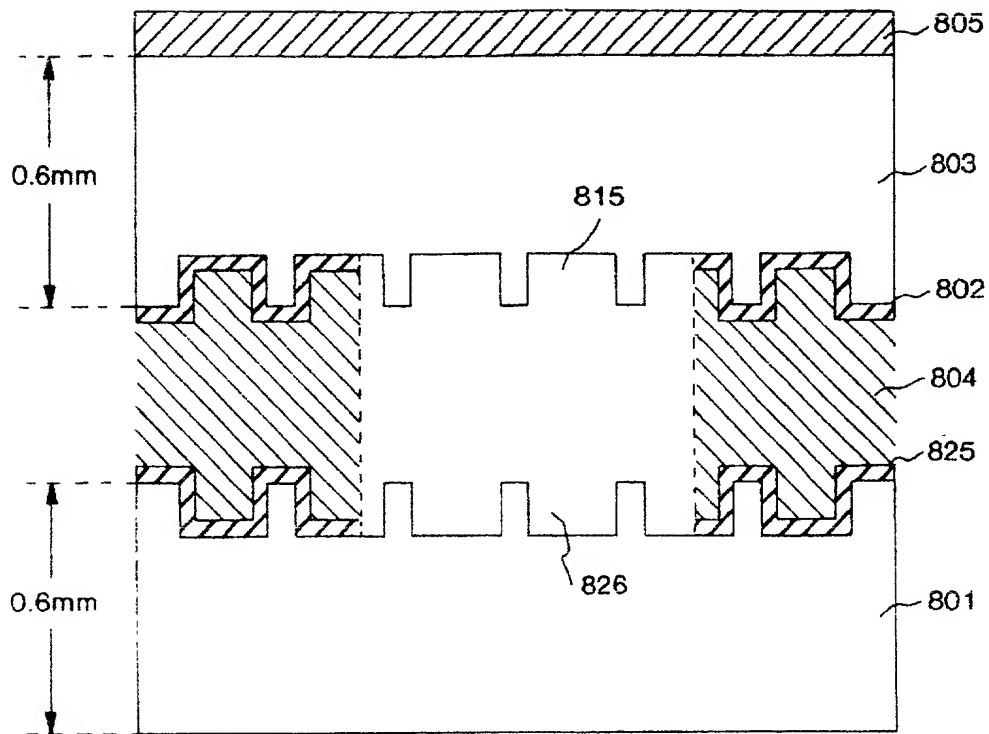


FIG. 10A

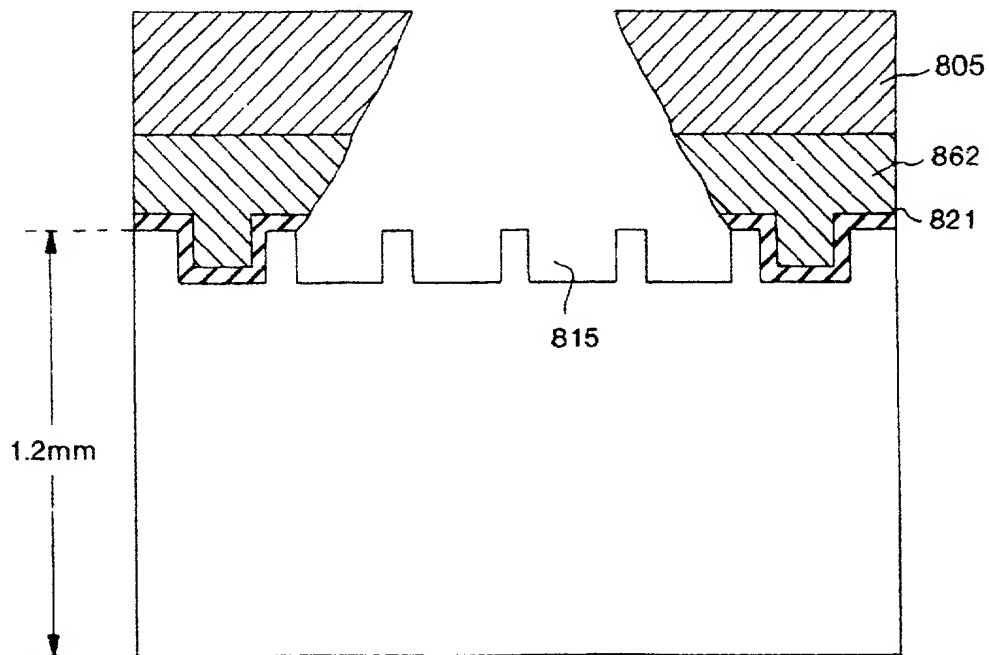


FIG. 10B

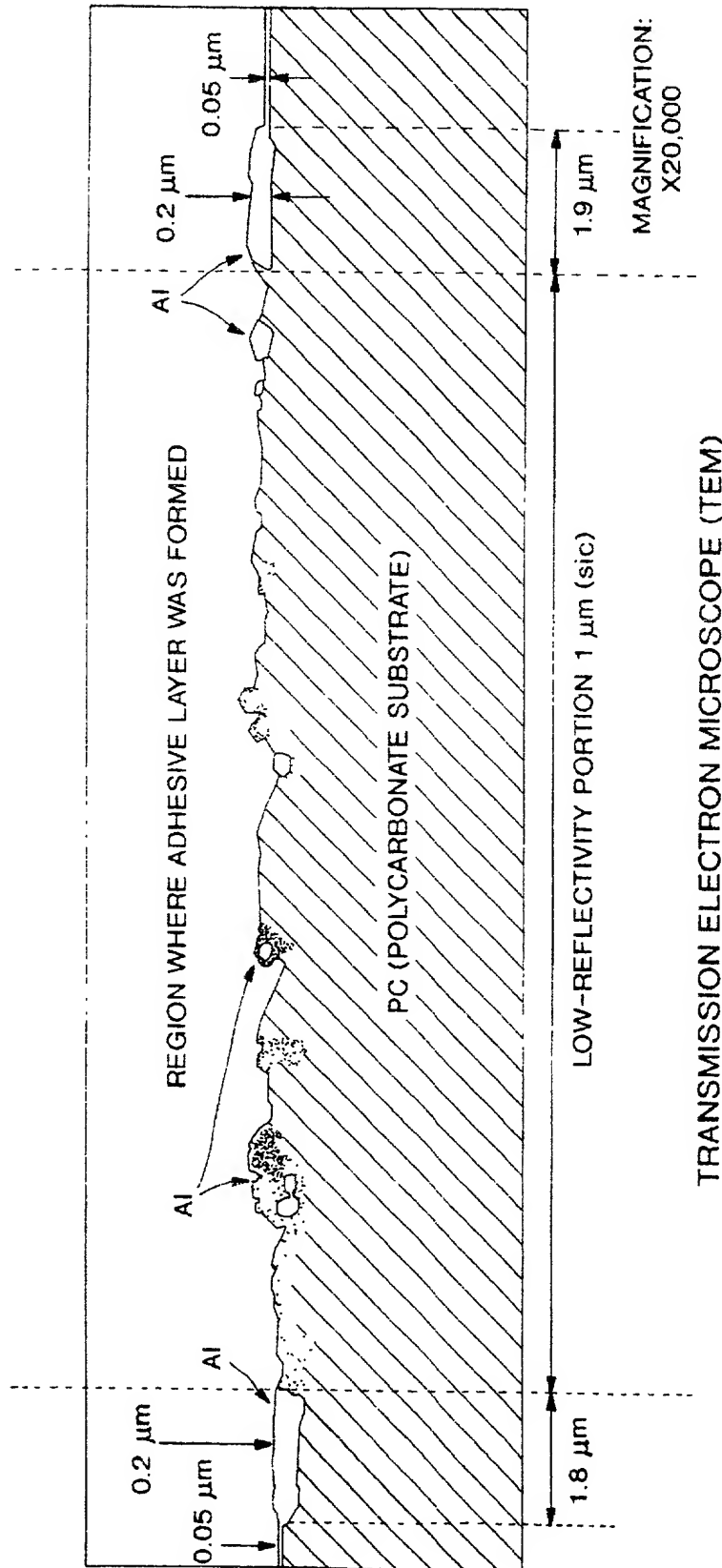


FIG. 11

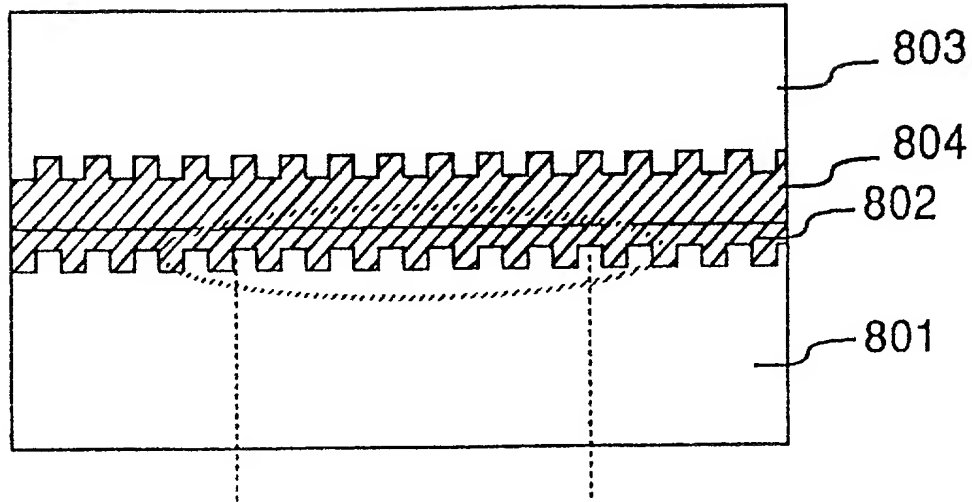


FIG. 12A

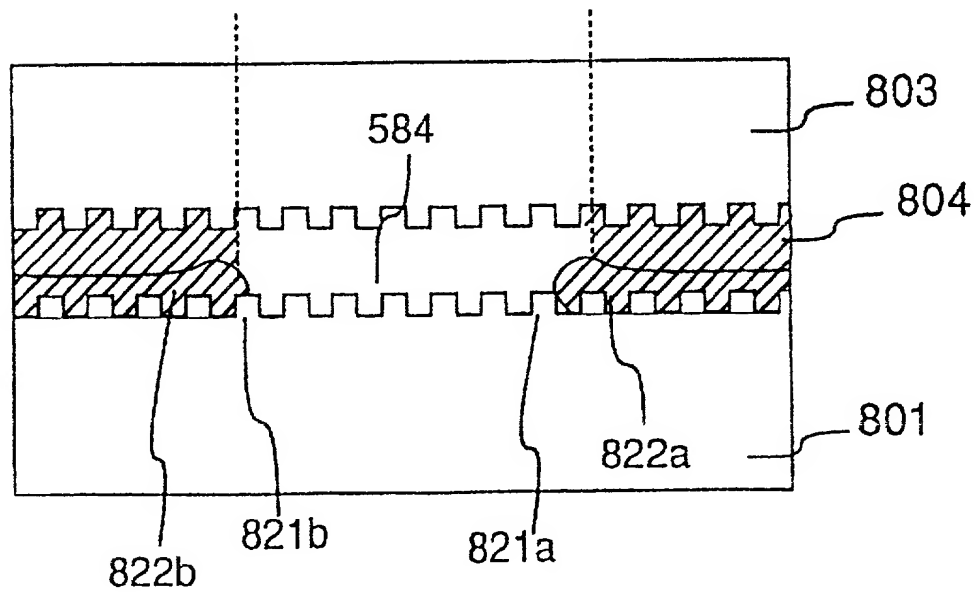


FIG. 12B

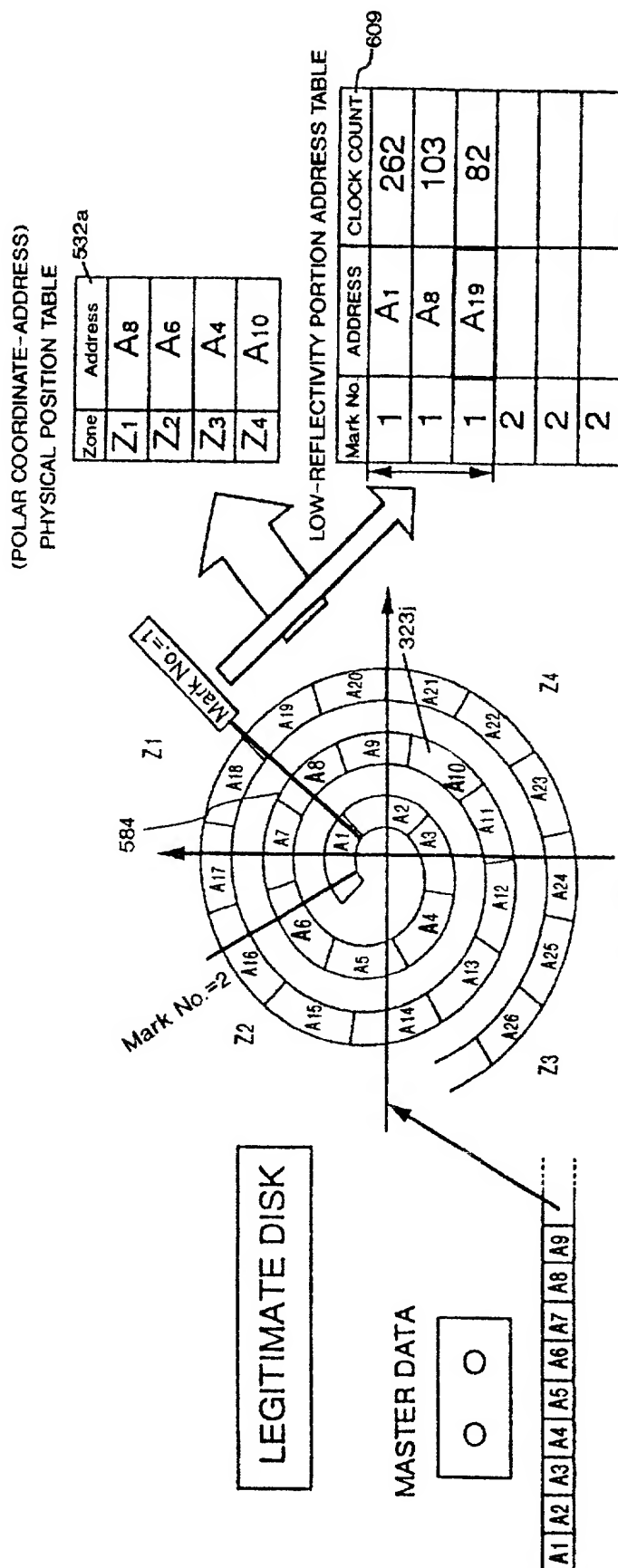


FIG. 13B

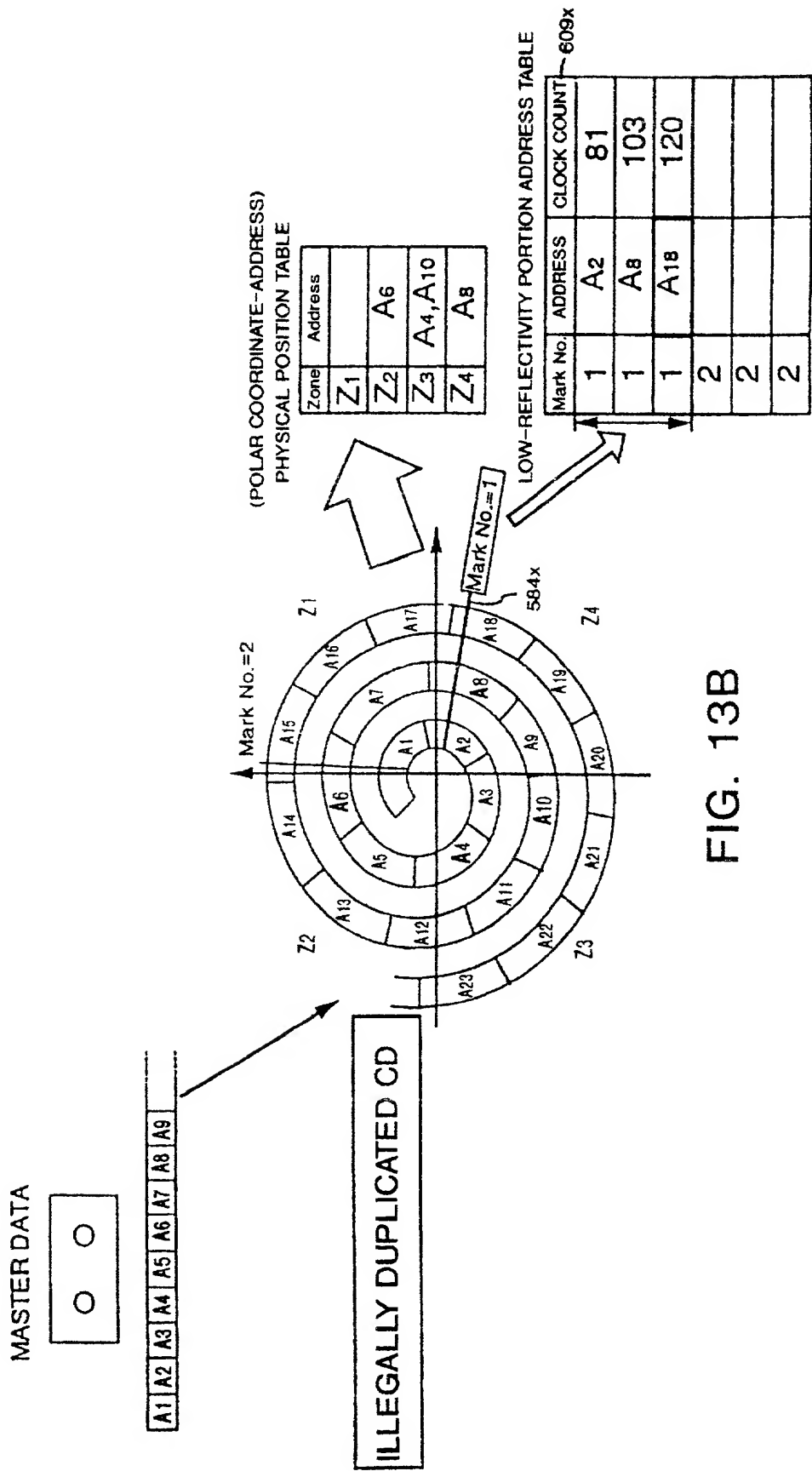


FIG. 13B

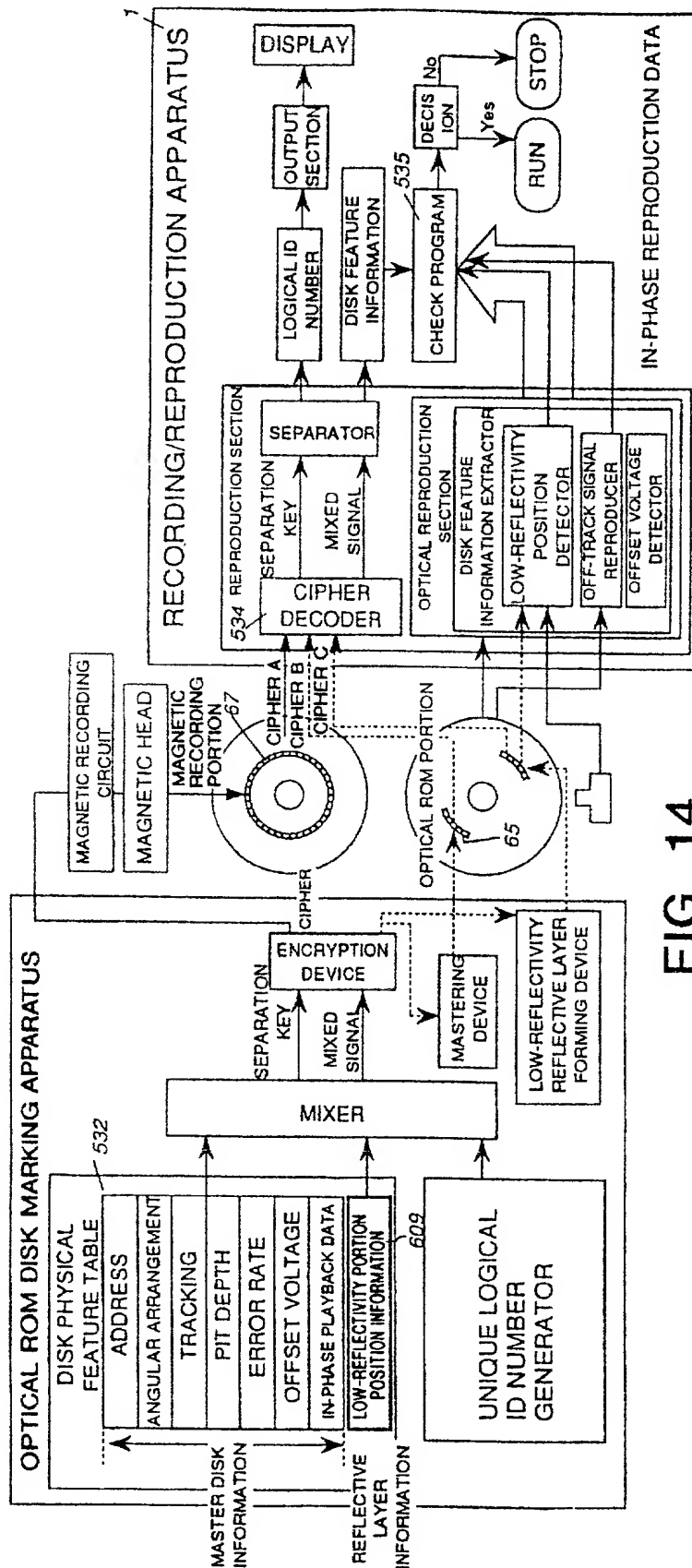
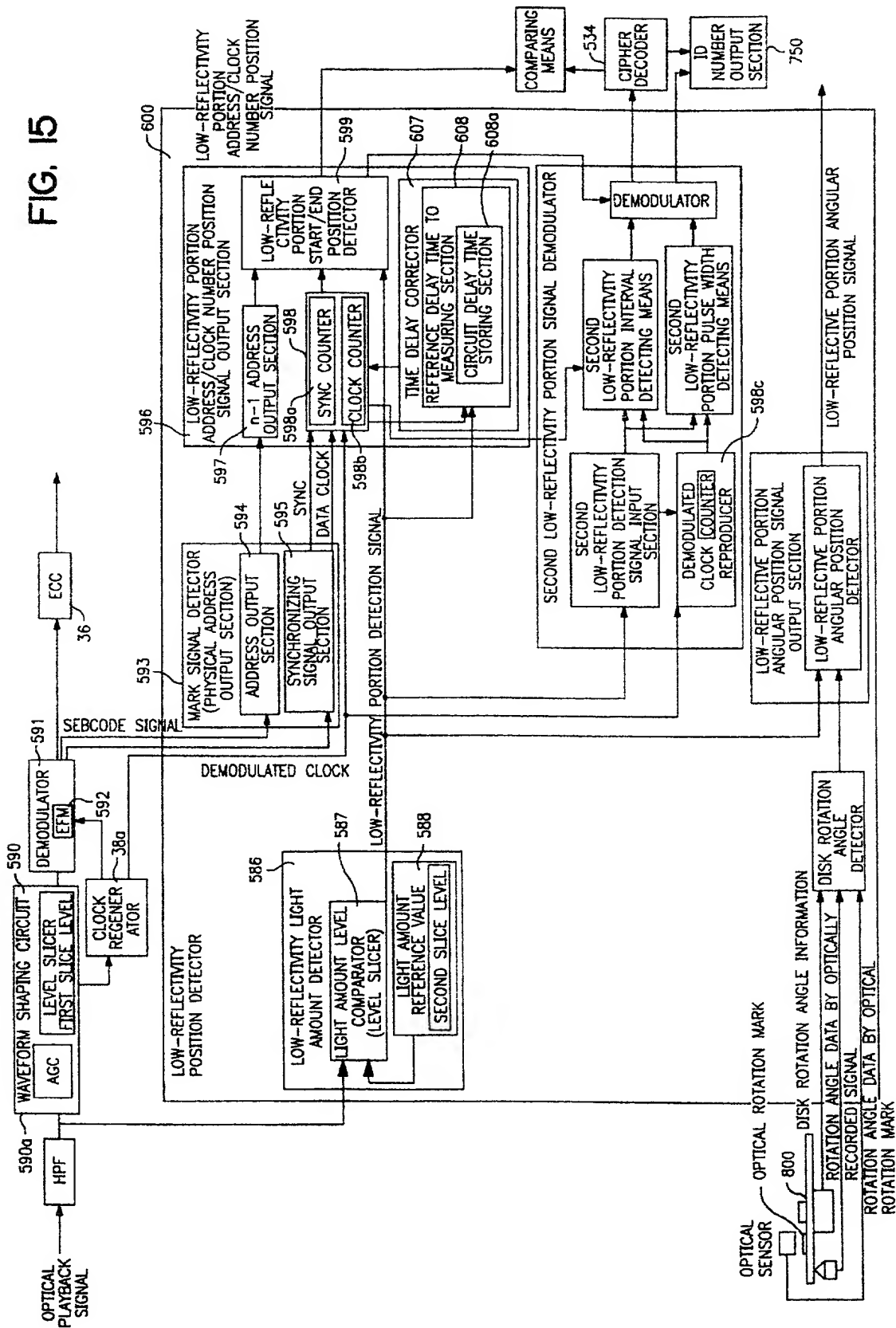


FIG. 14

५७



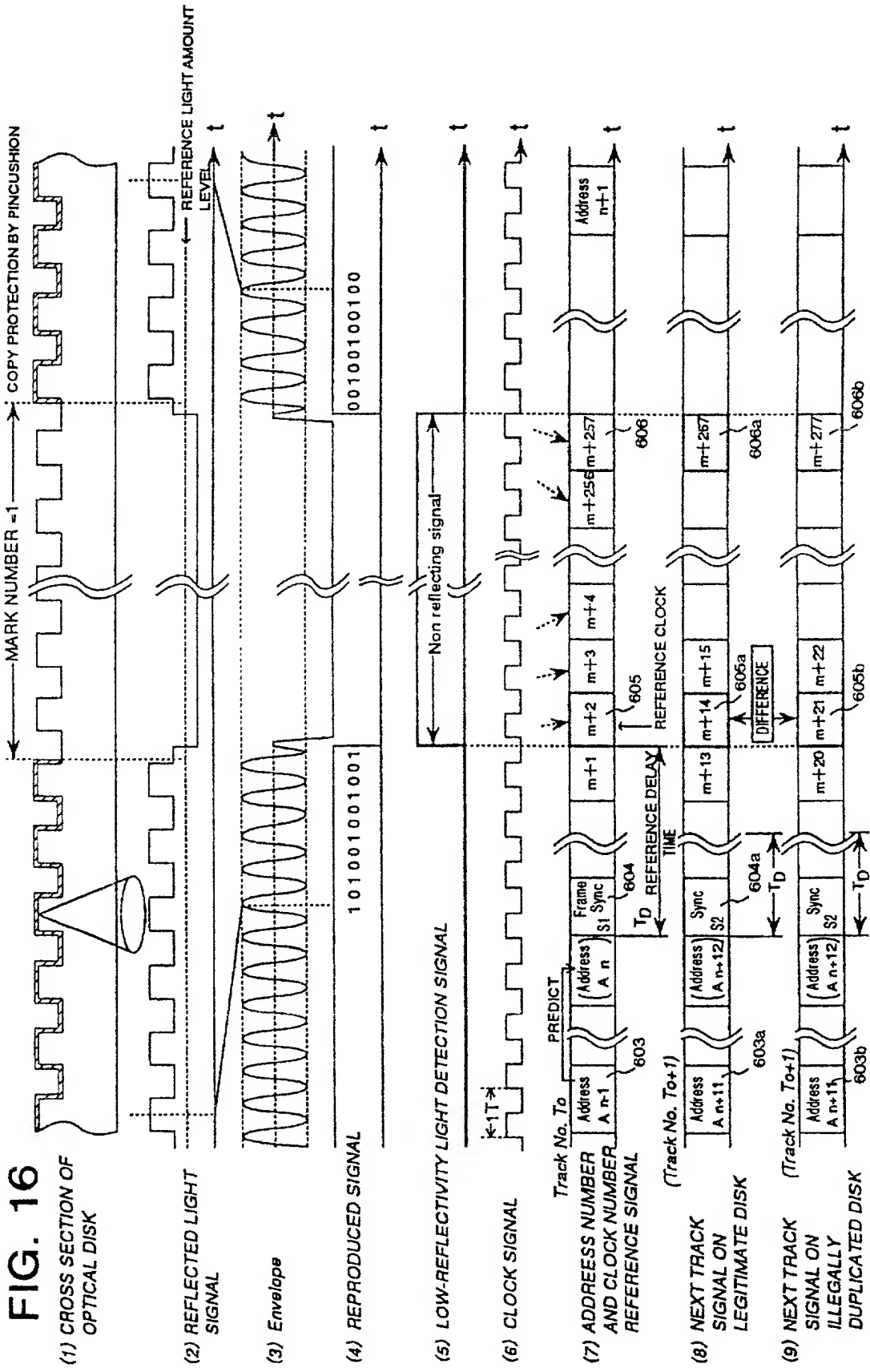


FIG. 17

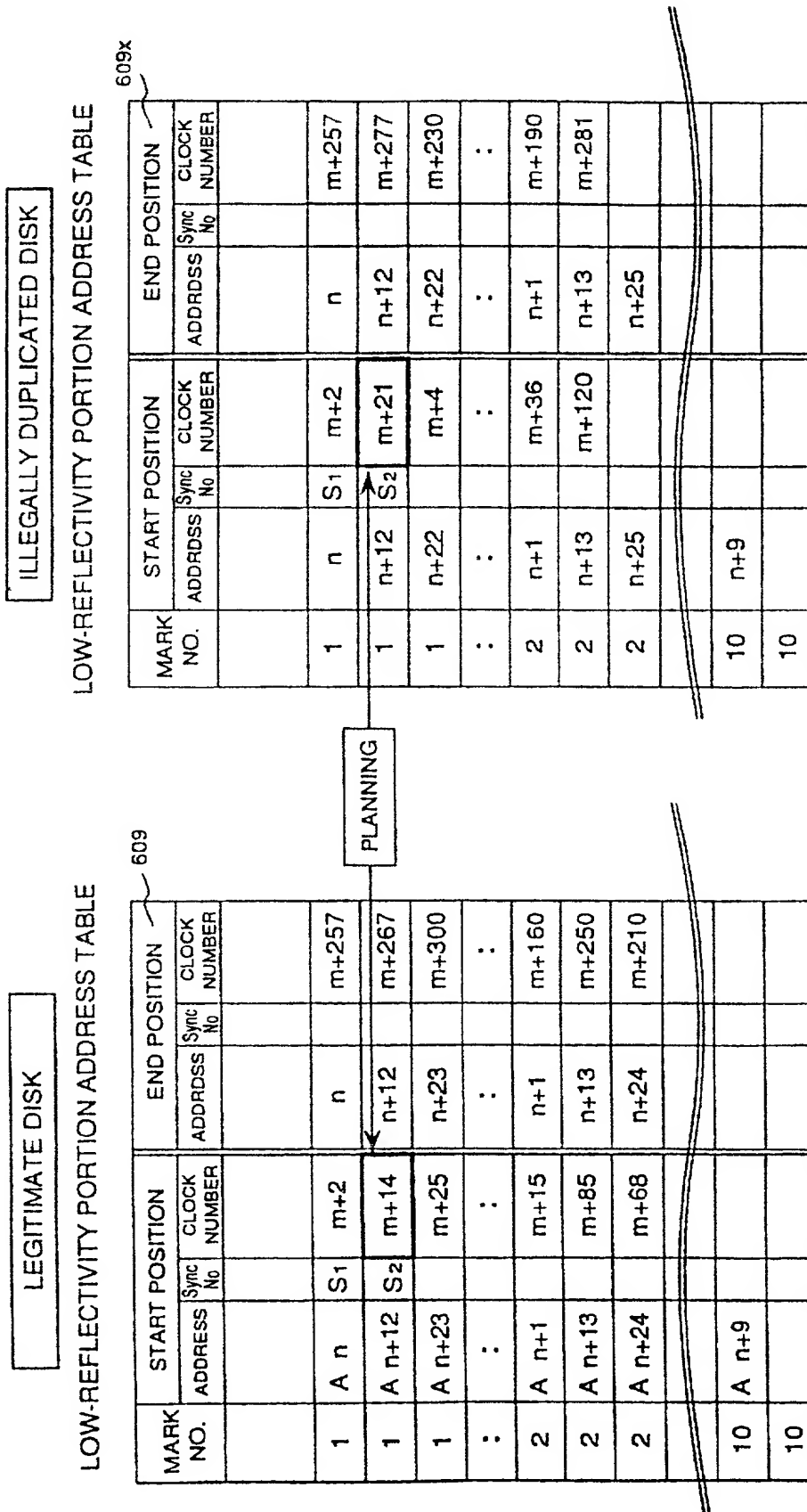


FIG. 17

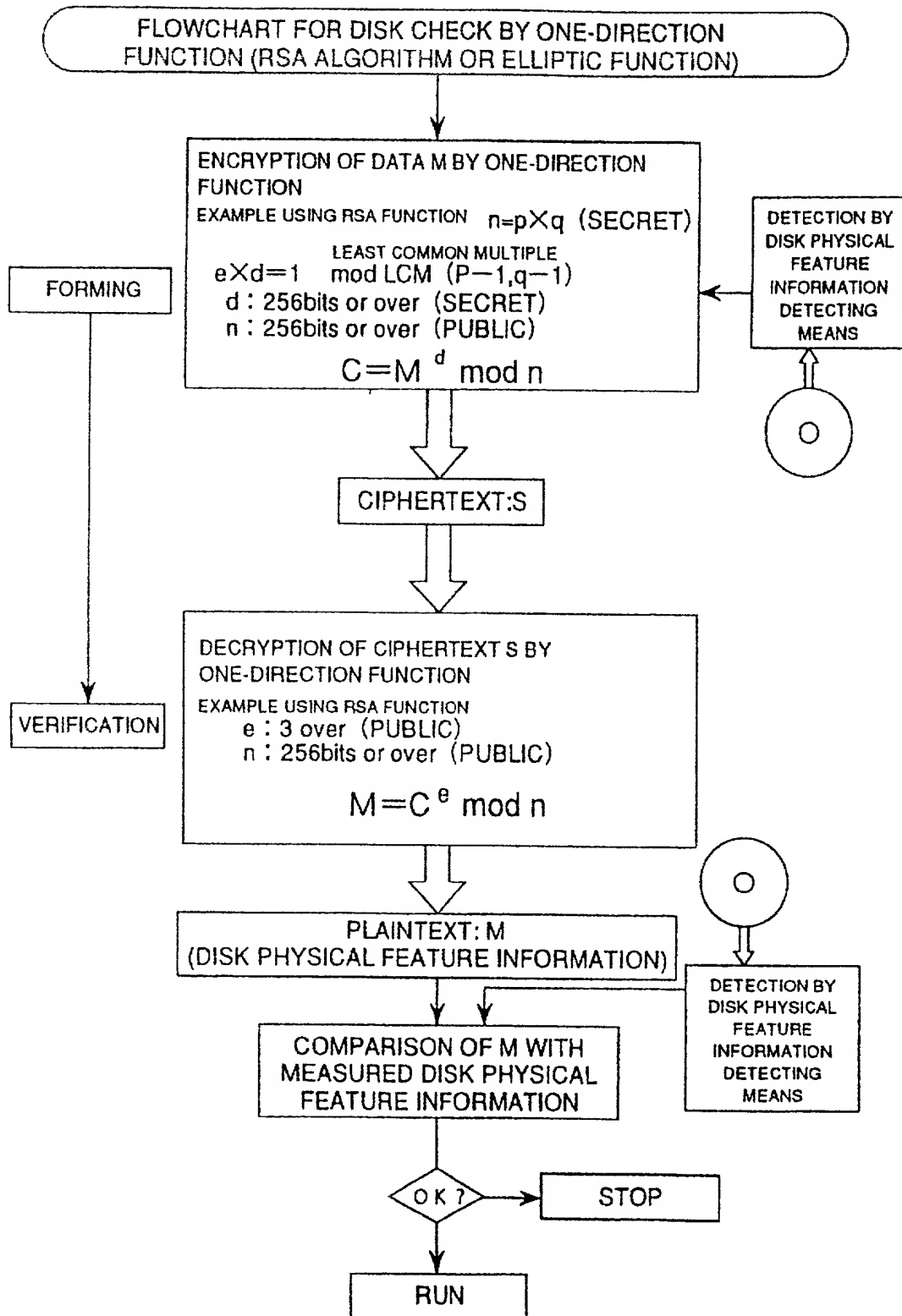


FIG. 18

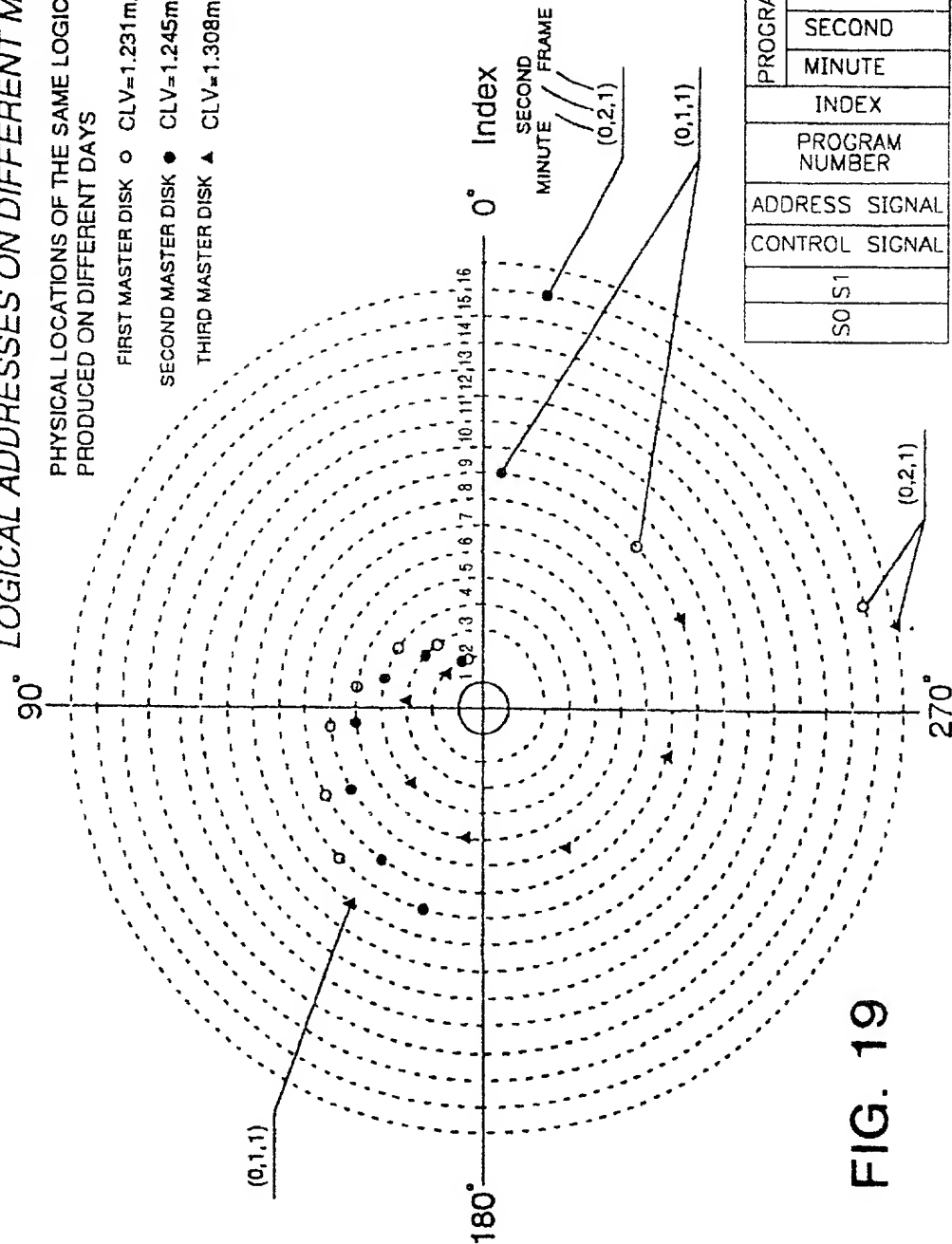
DIAGRAM SHOWING DIFFERENT PHYSICAL LOCATIONS OF
LOGICAL ADDRESSES ON DIFFERENT MASTER DISKS

PHYSICAL LOCATIONS OF THE SAME LOGICAL ADDRESSES ON MASTER DISKS
PRODUCED ON DIFFERENT DAYS

FIRST MASTER DISK ○ CLV=1.231m/sec(SRC##2 MIS1)

SECOND MASTER DISK ● CLV=1.245m/sec(FZ-SJ1951A 3)

THIRD MASTER DISK ▲ CLV=1.308m/sec(FZ-SJ1951AT 8)



ERROR-CORRECTING CODE CRCC	
TOTAL	SCC
	SECOND
	MINUTE
0	
PROGRAM	SCC
	SECOND
	MINUTE
INDEX	
PROGRAM NUMBER	
ADDRESS SIGNAL	
CONTROL SIGNAL	
S0 S1	

FIG. 19



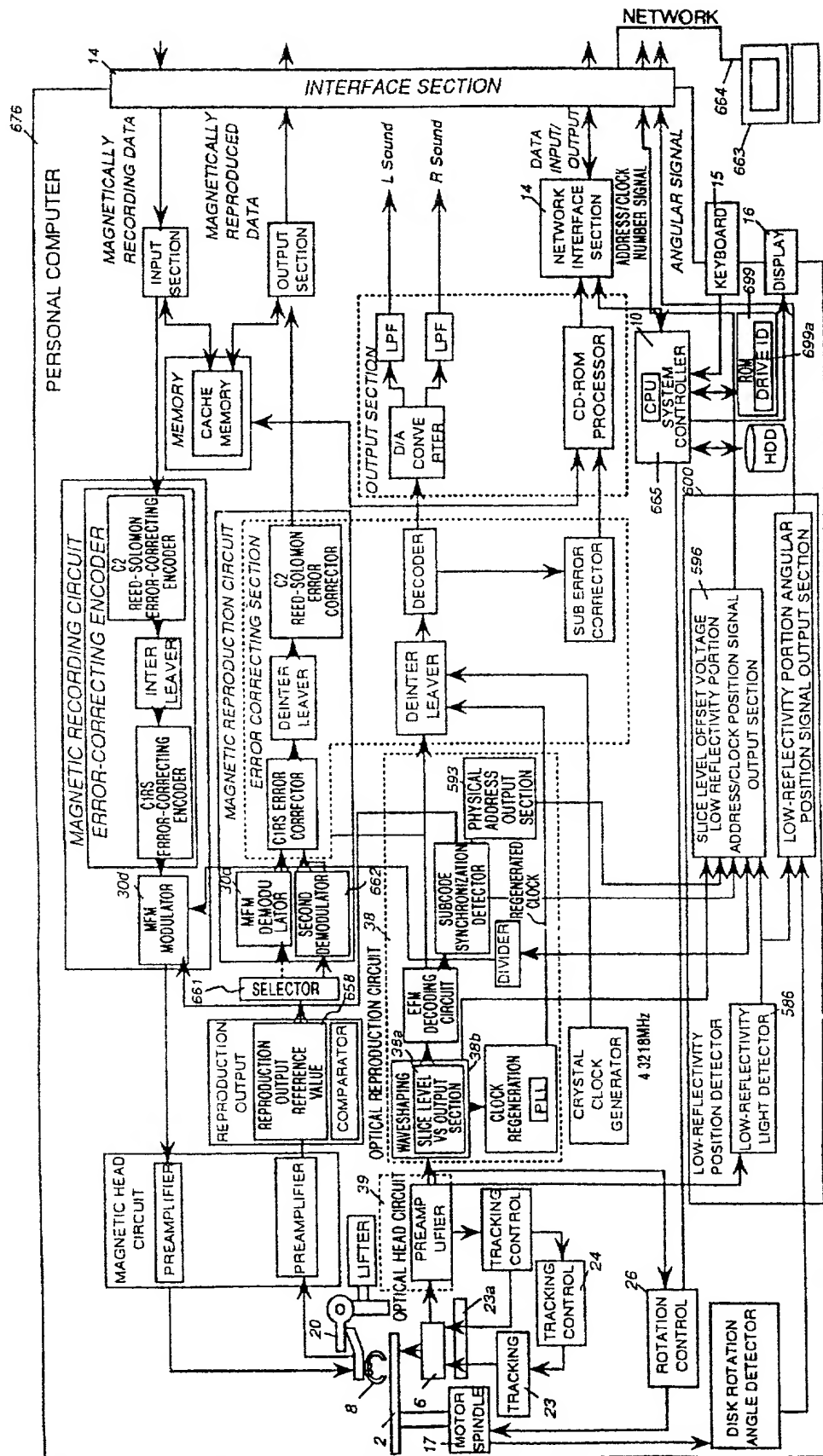


FIG. 21

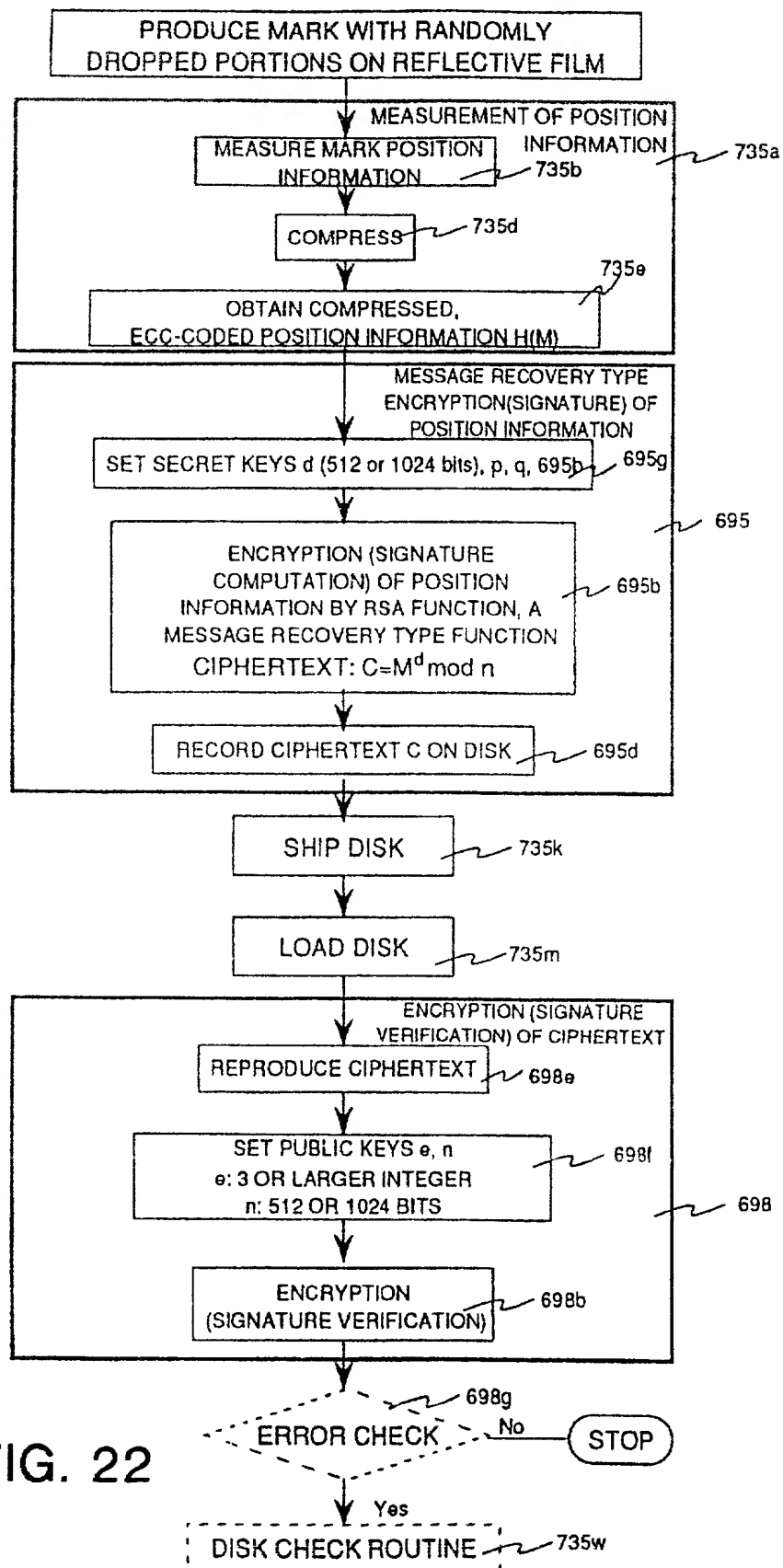


FIG. 22

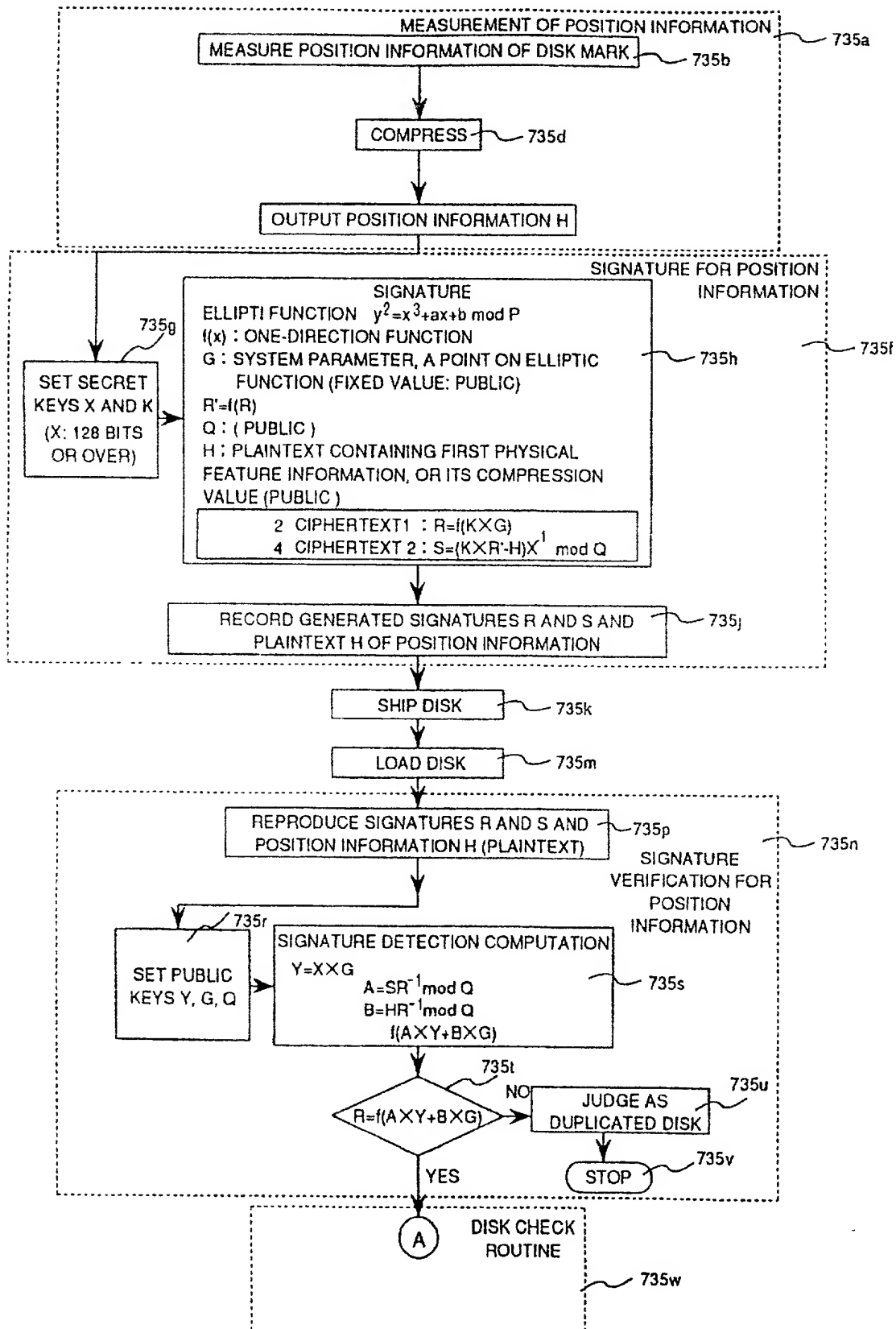


FIG. 23

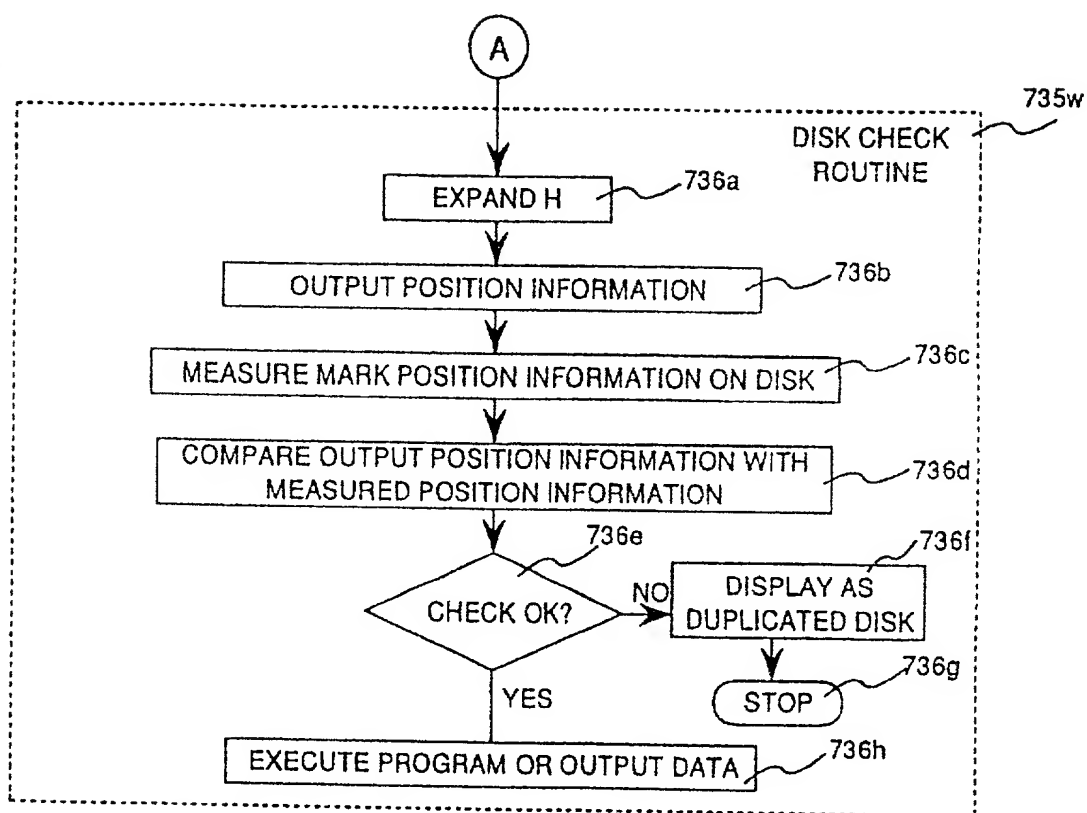


FIG. 24

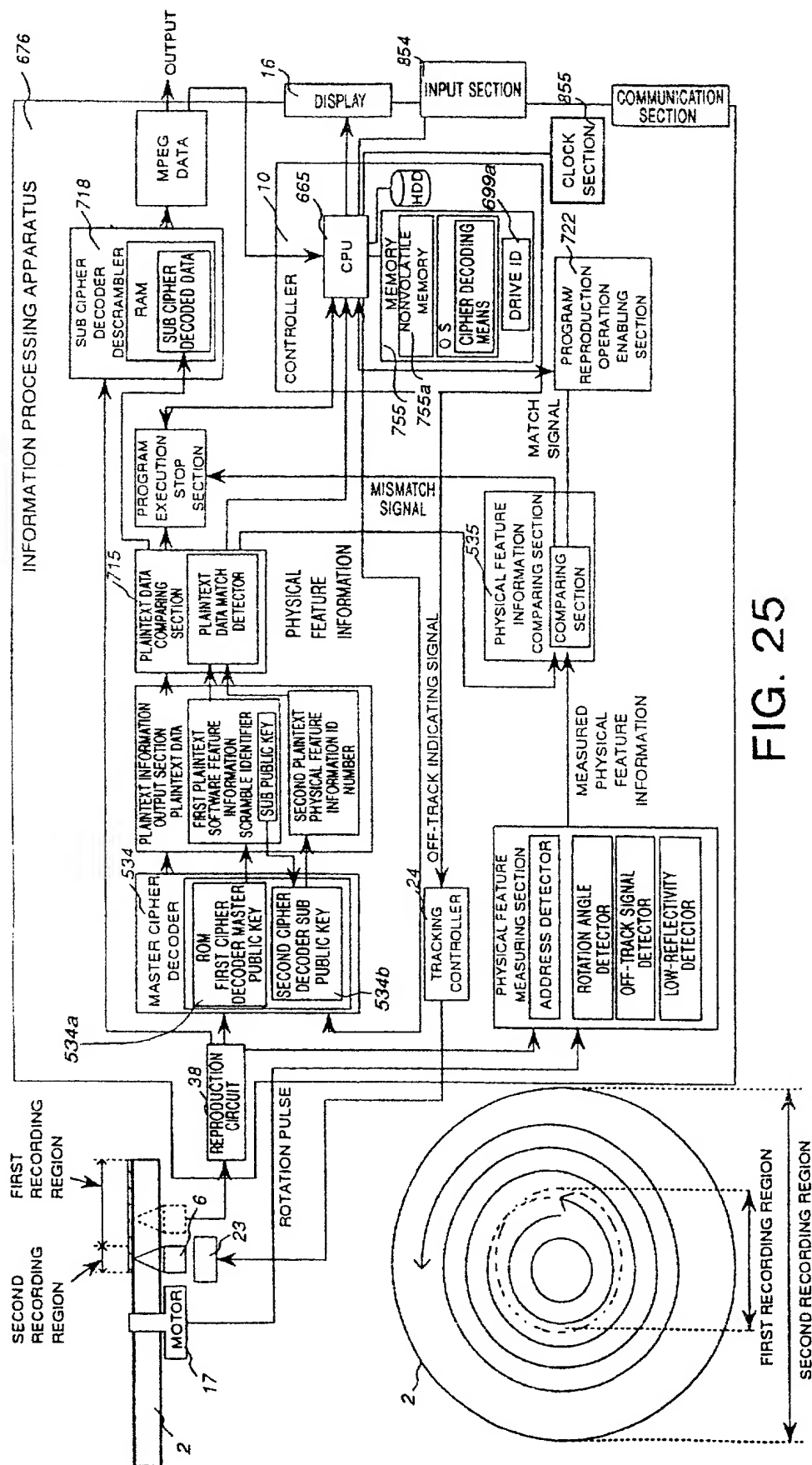
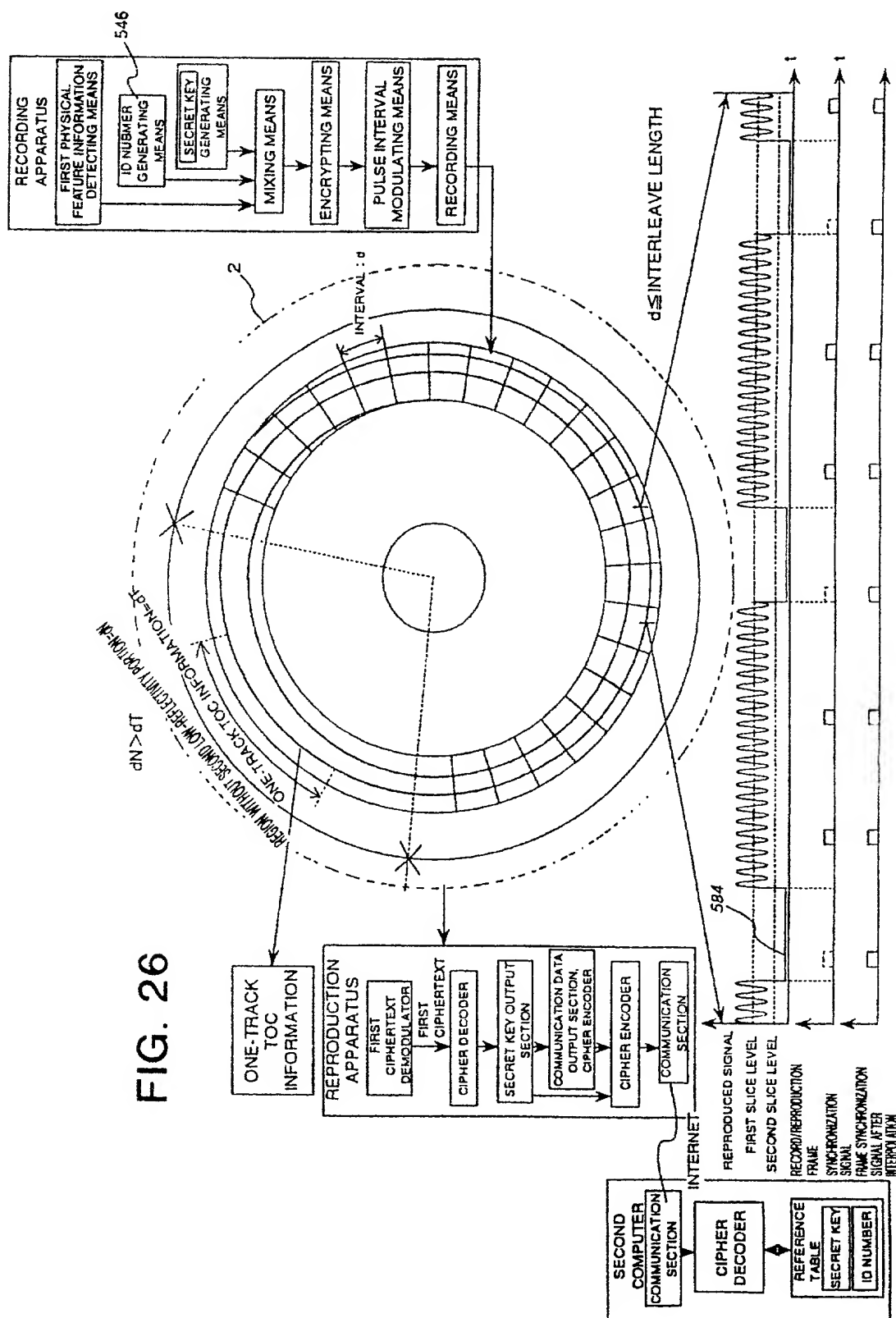
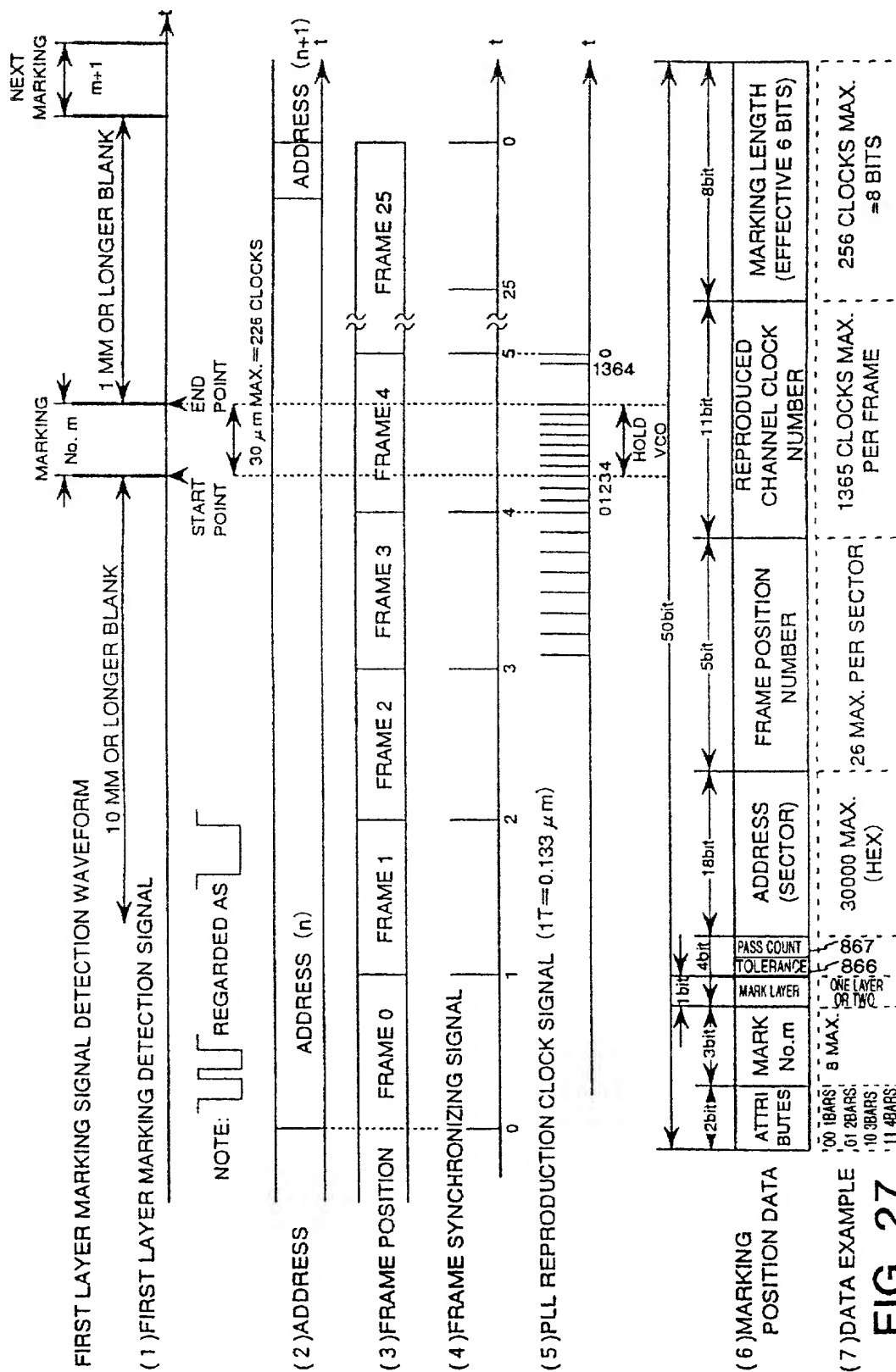
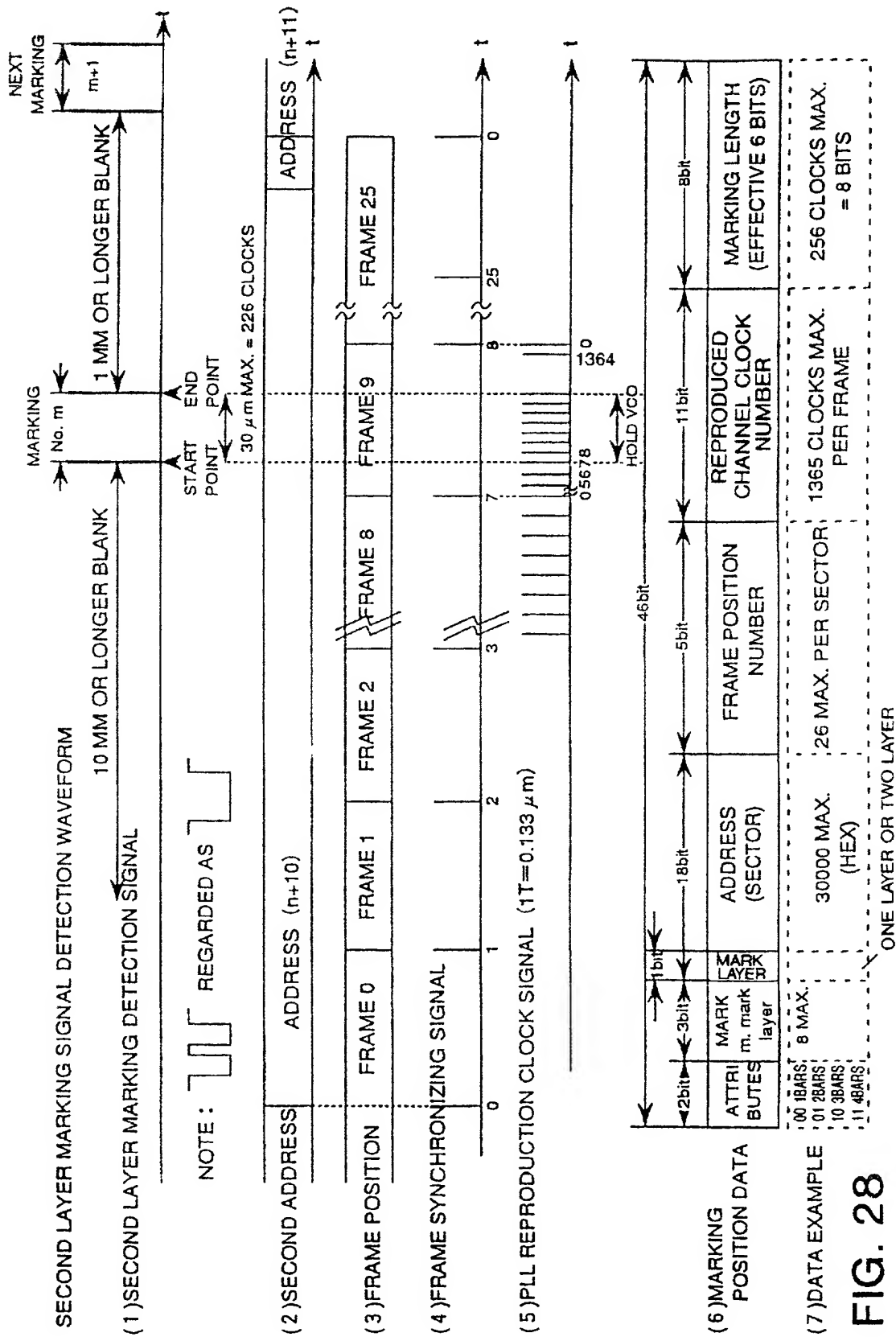


FIG. 25

FIG. 26







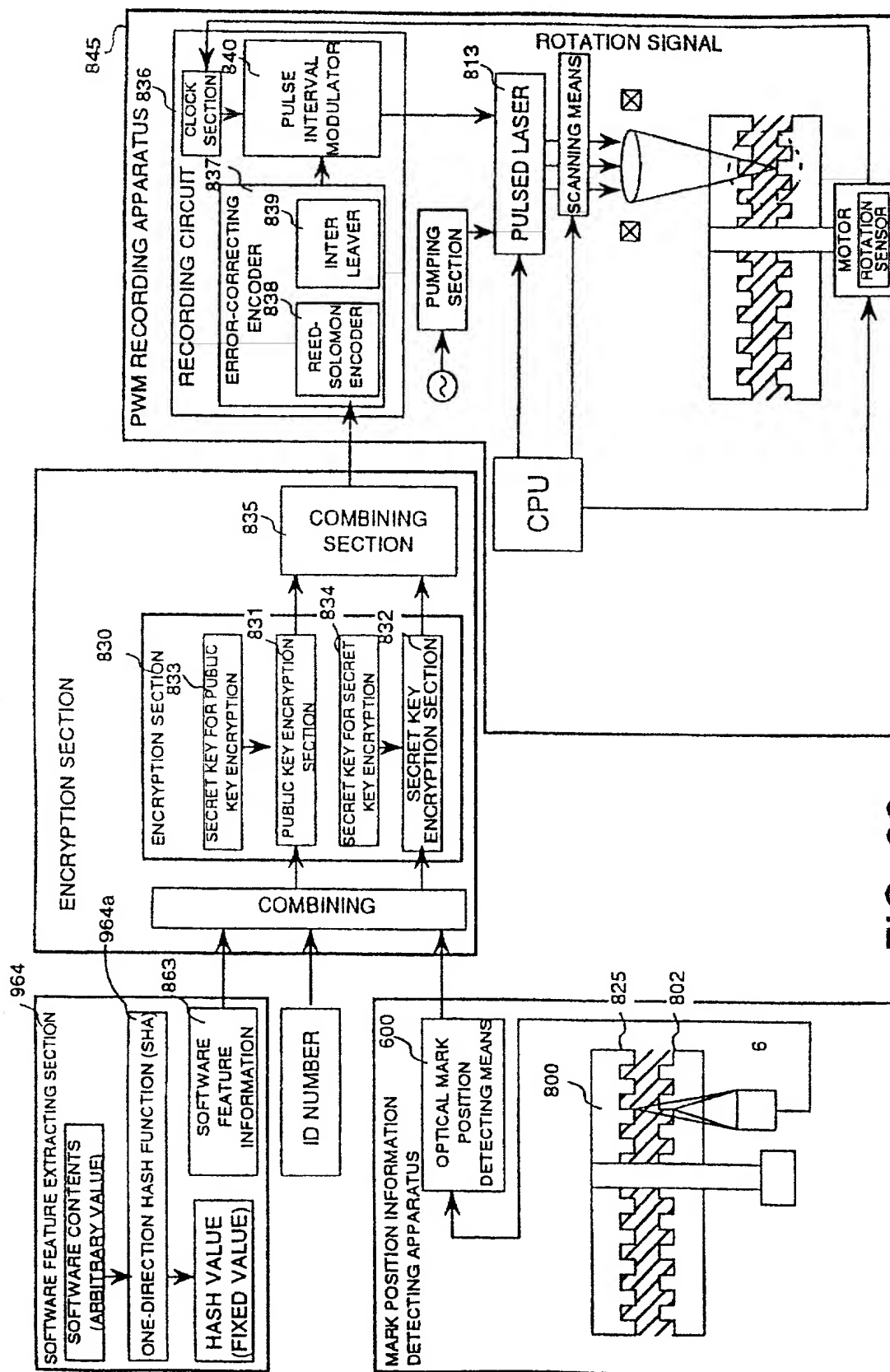


FIG. 29

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																																																																																																																																																																																																
Population (millions)	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	31.0	31.1	31.2	31.3	31.4

CODE CLASSIFIED BY PULSE INTERVAL, 4-VALUE PWM RECORDING

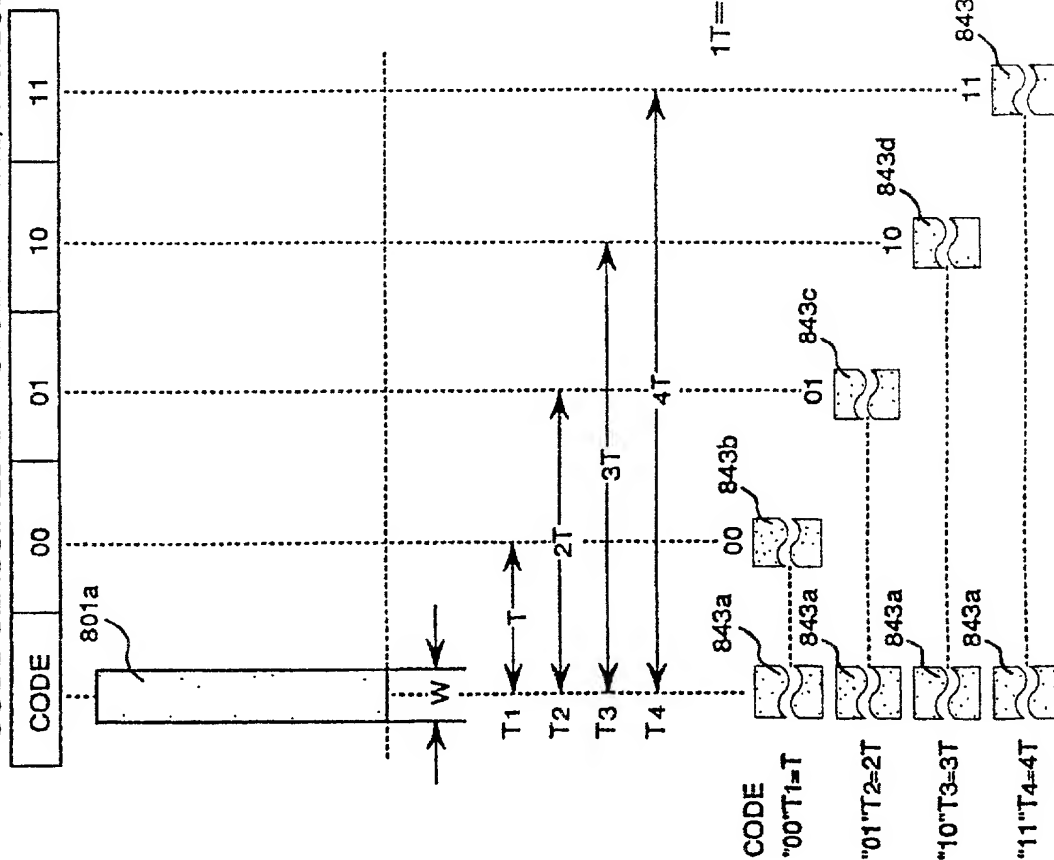


FIG. 30

842
BARCODE LINE WIDTH VERSUS RECORDING DENSITY

LINE WIDTH	PERIOD	RECORDING DENSITY	MAXIMUM RECORDING CAPACITY	LENGTH OF 1 KBITS
$W (\mu m)$	$T (\mu m)$	$\mu m/bit$	ONE RING	mm
1 μm	2 μm	2.55 μm	56Kbit	2.5mm
3 μm	6 μm	7.5 μm	28.2Kbit	5mm
5 μm	10 μm	12.5 μm	11.2Kbit	12.5mm
10 μm	20 μm	25 μm	5.6Kbit	25mm
20 μm	40 μm	50 μm	2.82Kbit	50mm

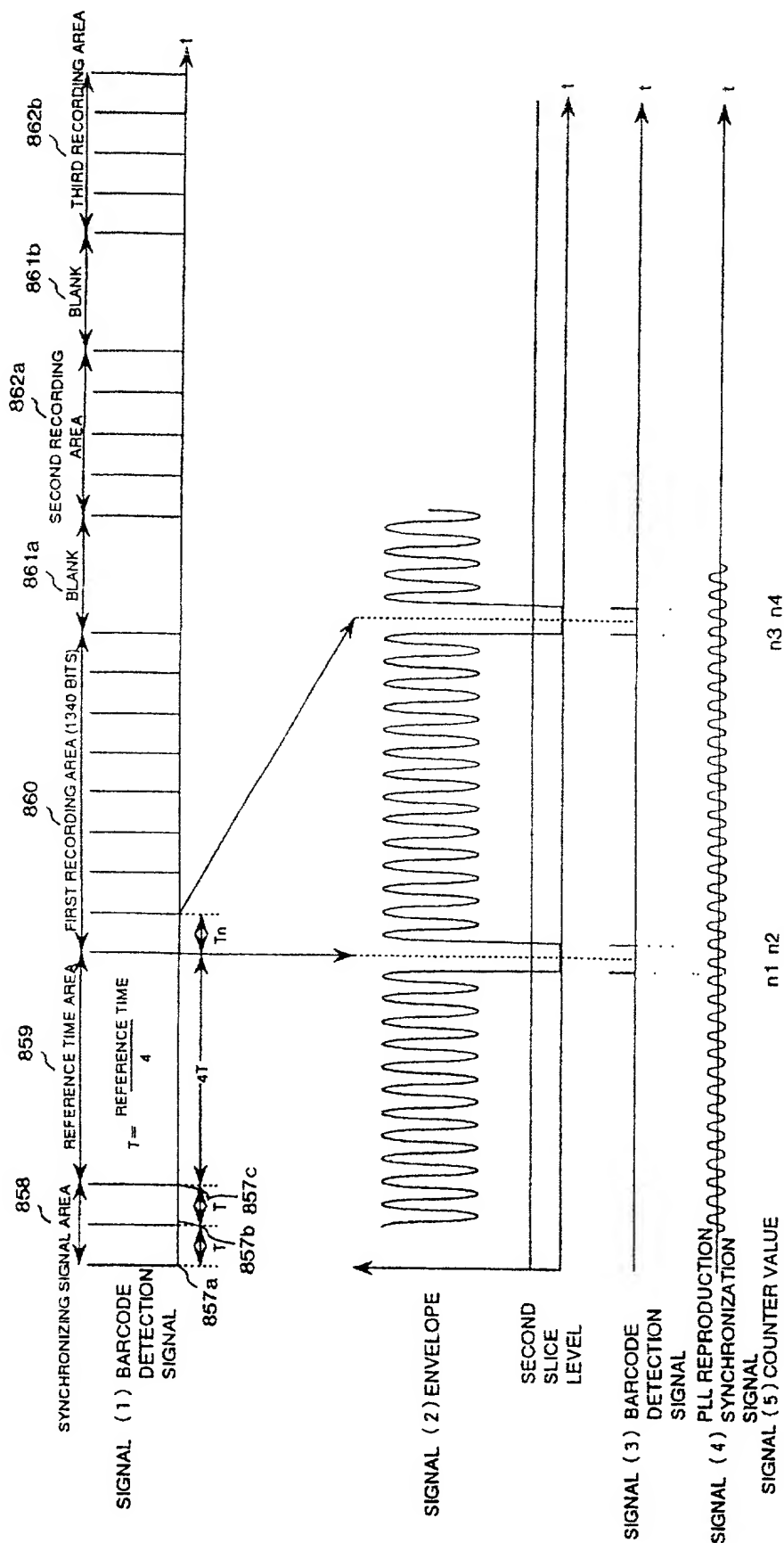
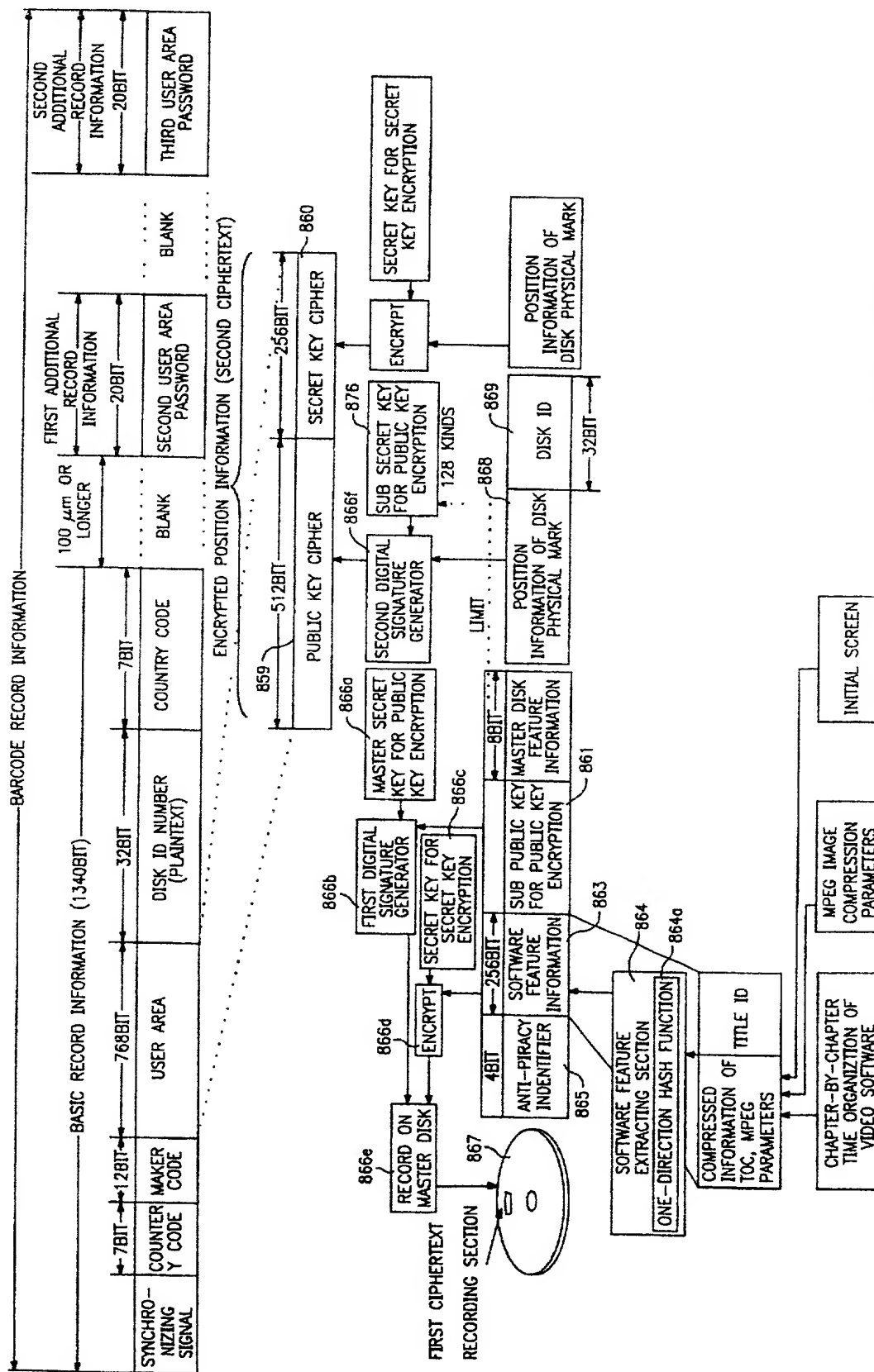


FIG. 31

1T: 00, 2T: 01, 3T: 10, 4T: 11

$$T_n = \text{PULSE INTERVAL} = \frac{n3+n4}{2} - \frac{n1+n2}{2}$$

SIGNAL (6) DECODED VALUE
(PROCESSED BY
8-BIT
MICROCOMPUTER)



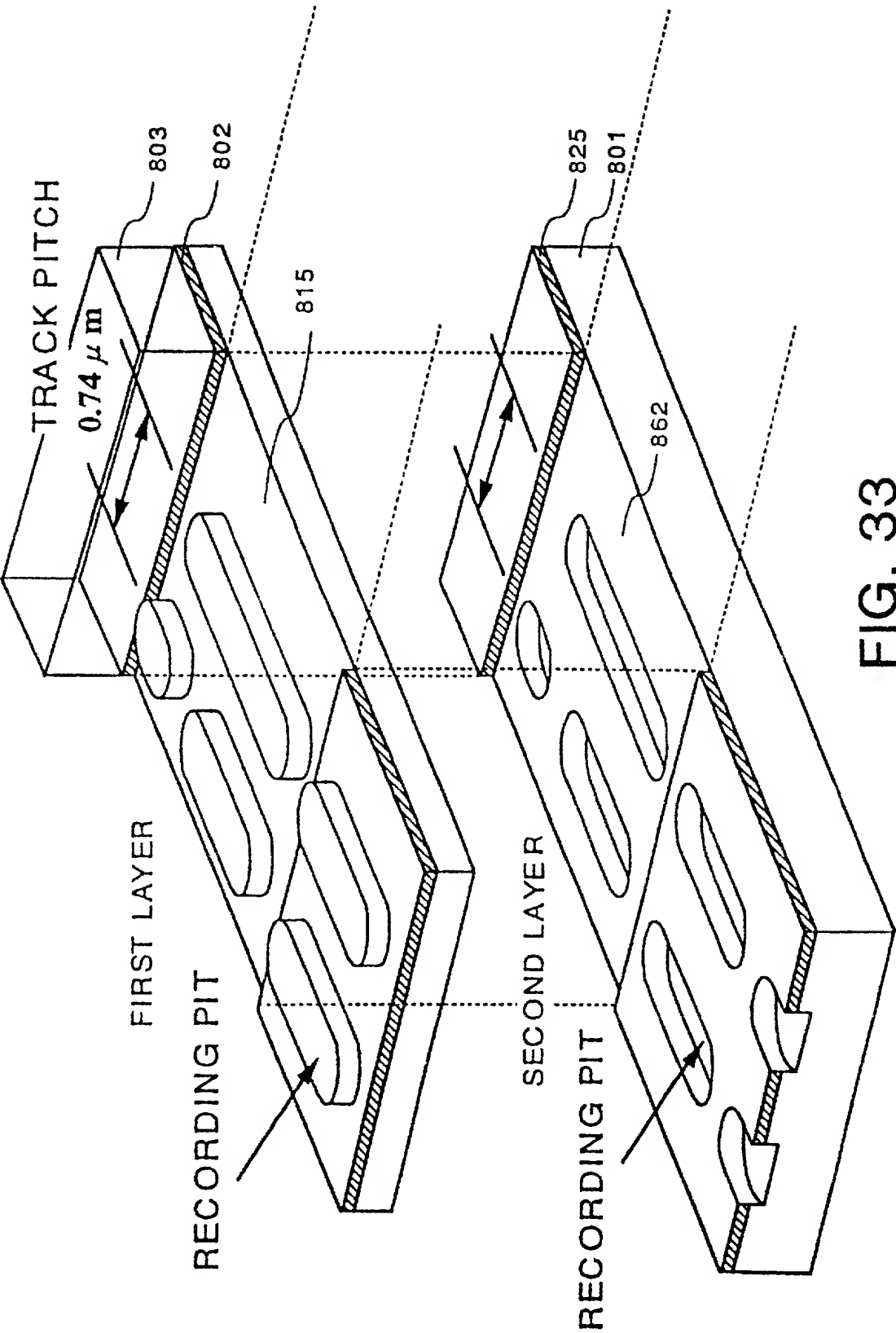
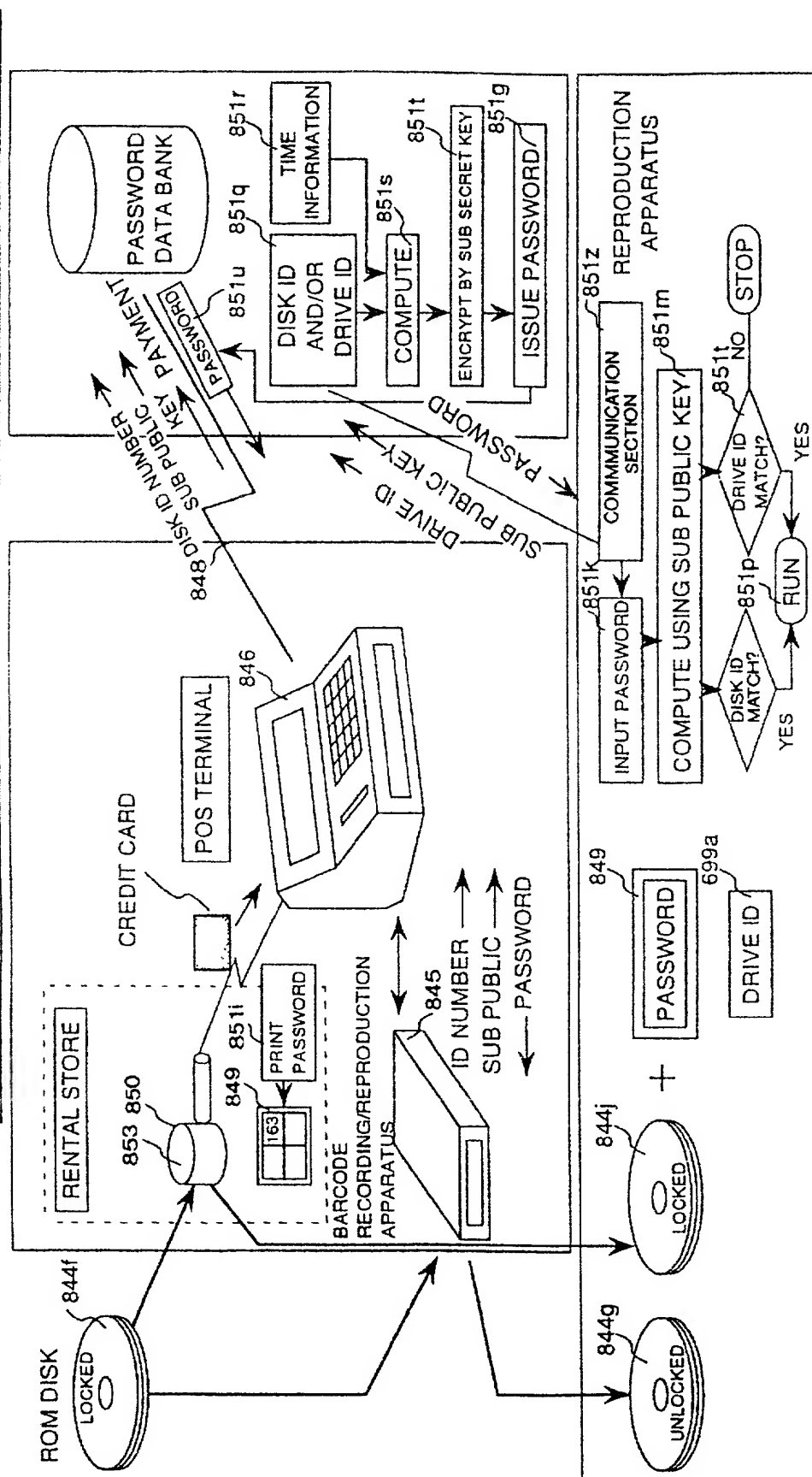


FIG. 33

RETAIL/RENTAL STORE



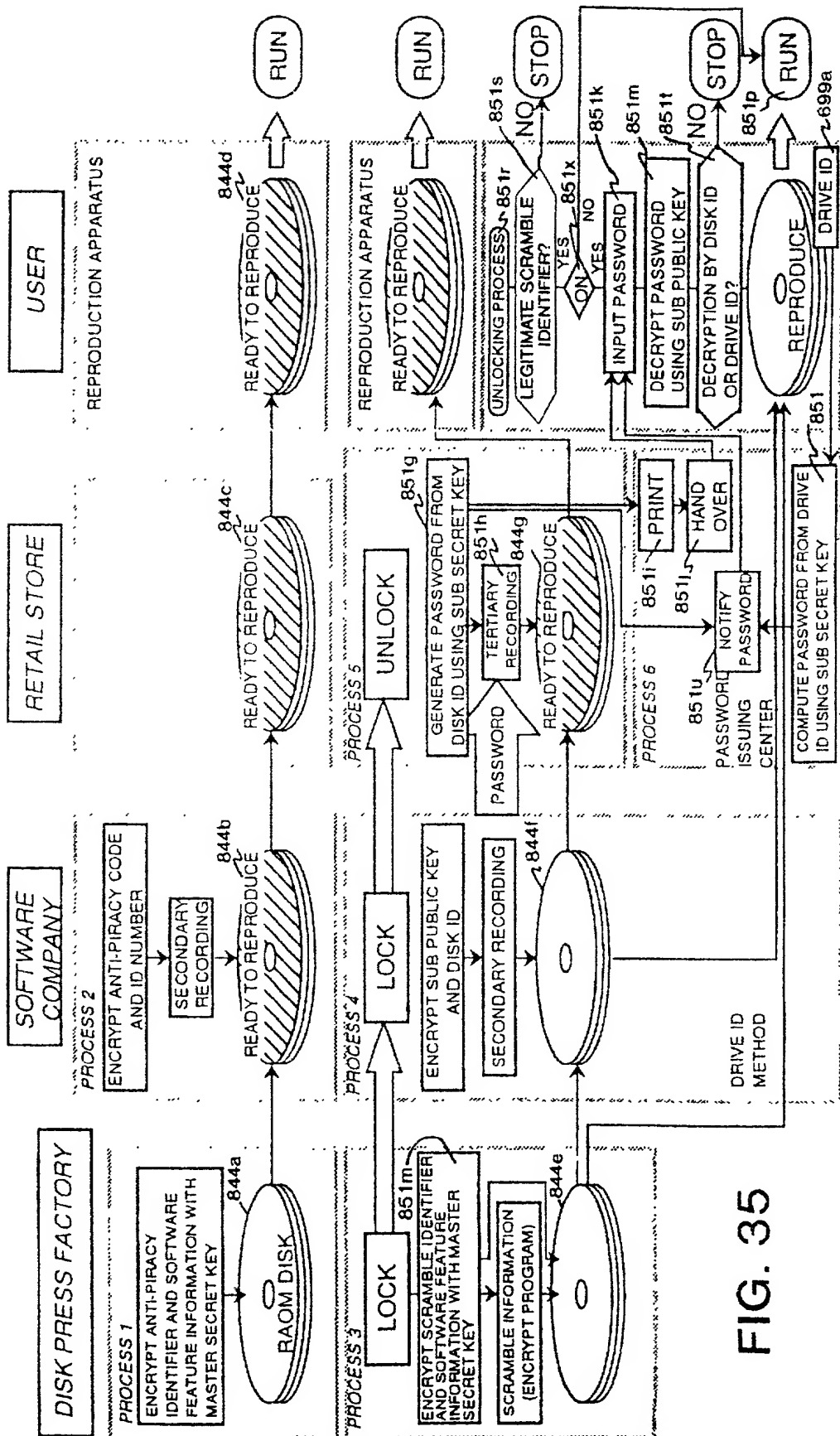


FIG. 35

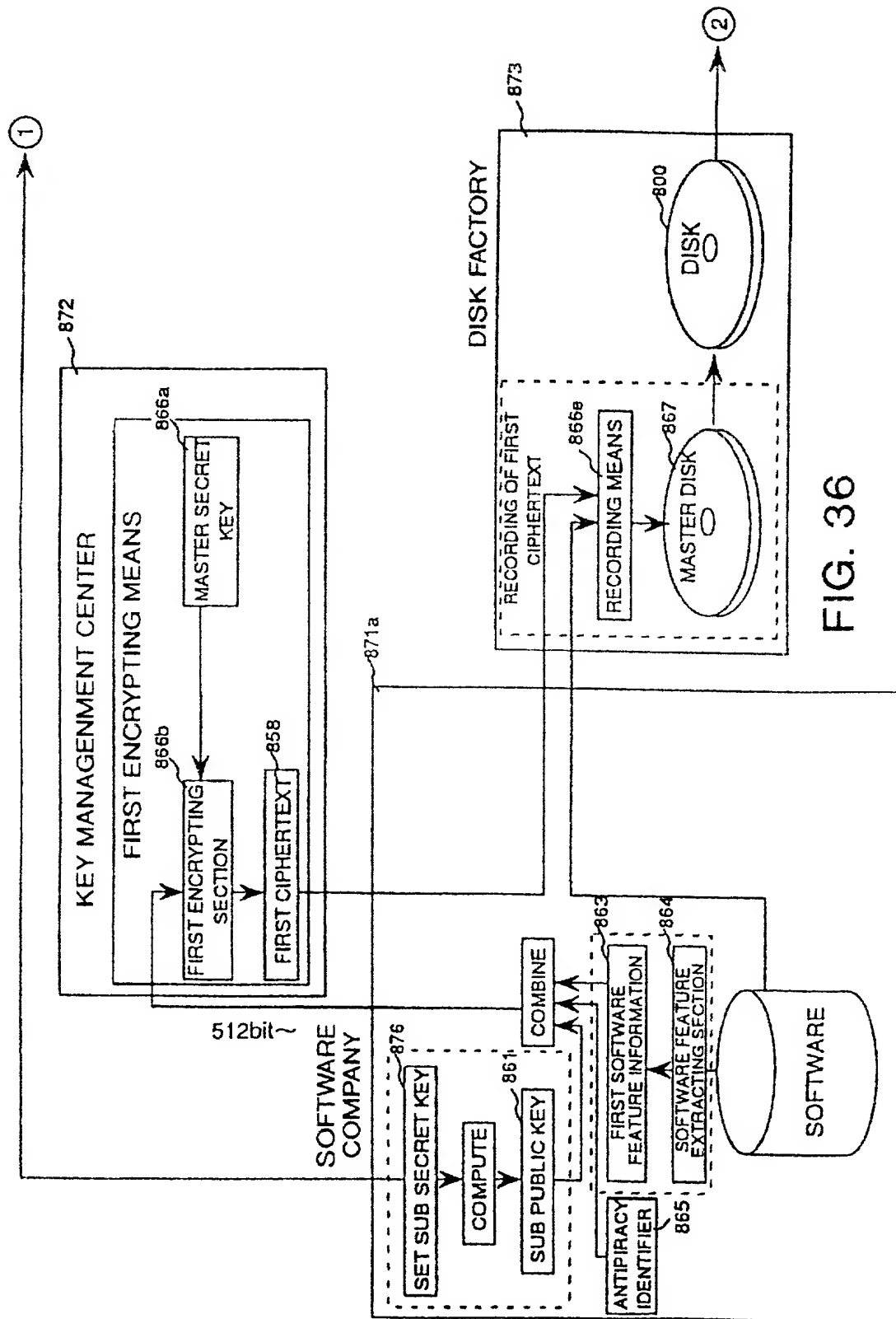


FIG. 36

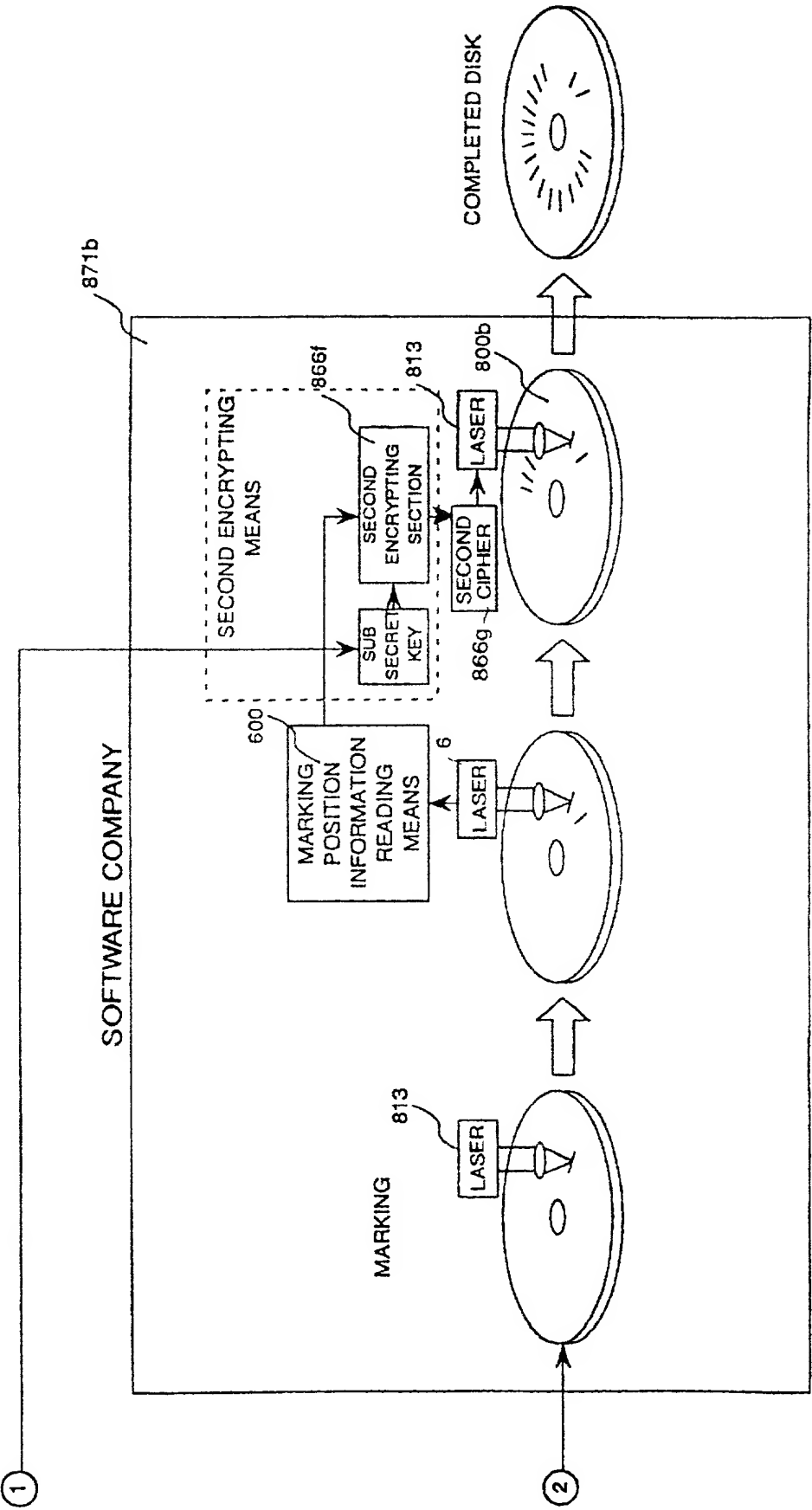


FIG. 37

FOOTNOTES

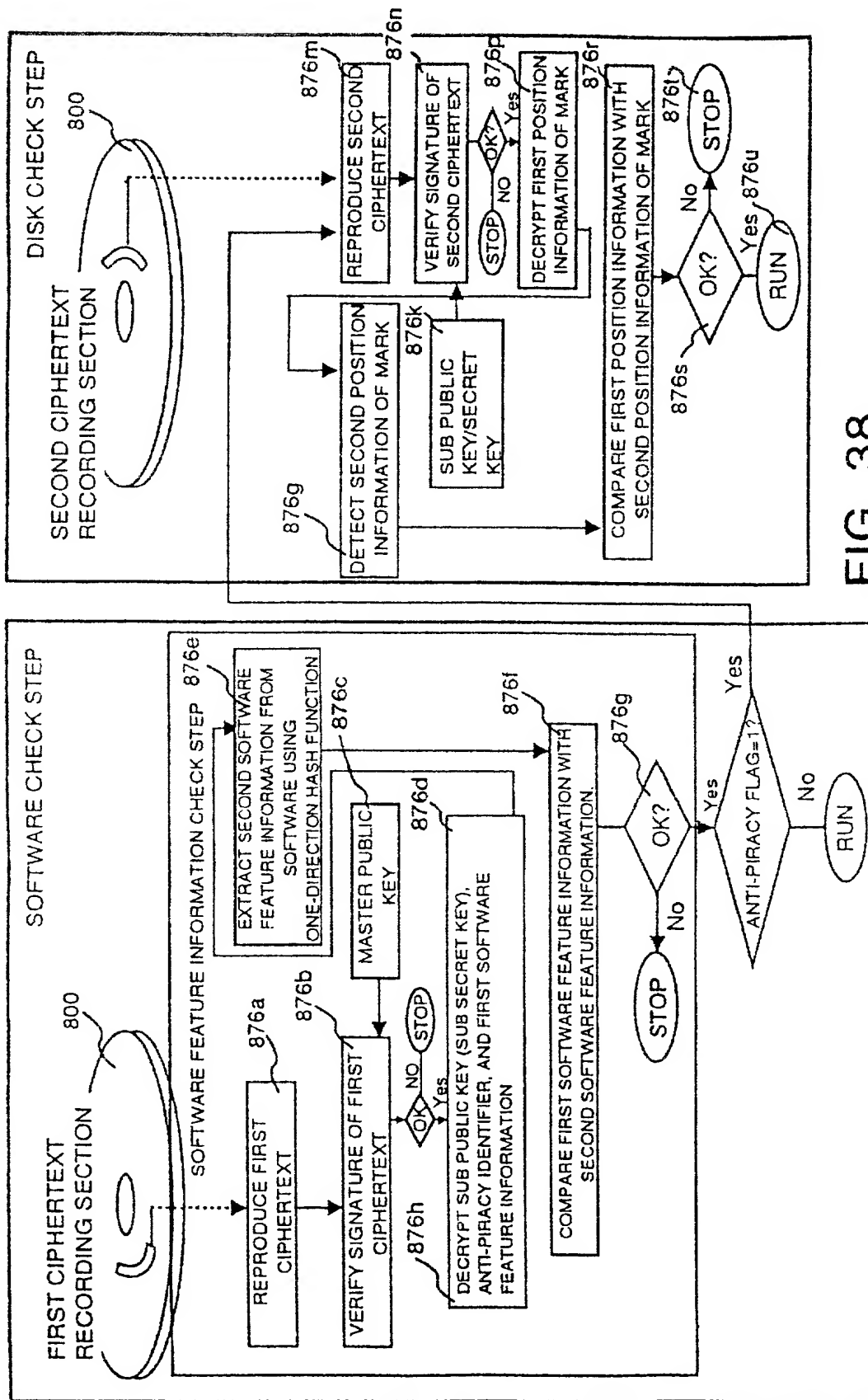
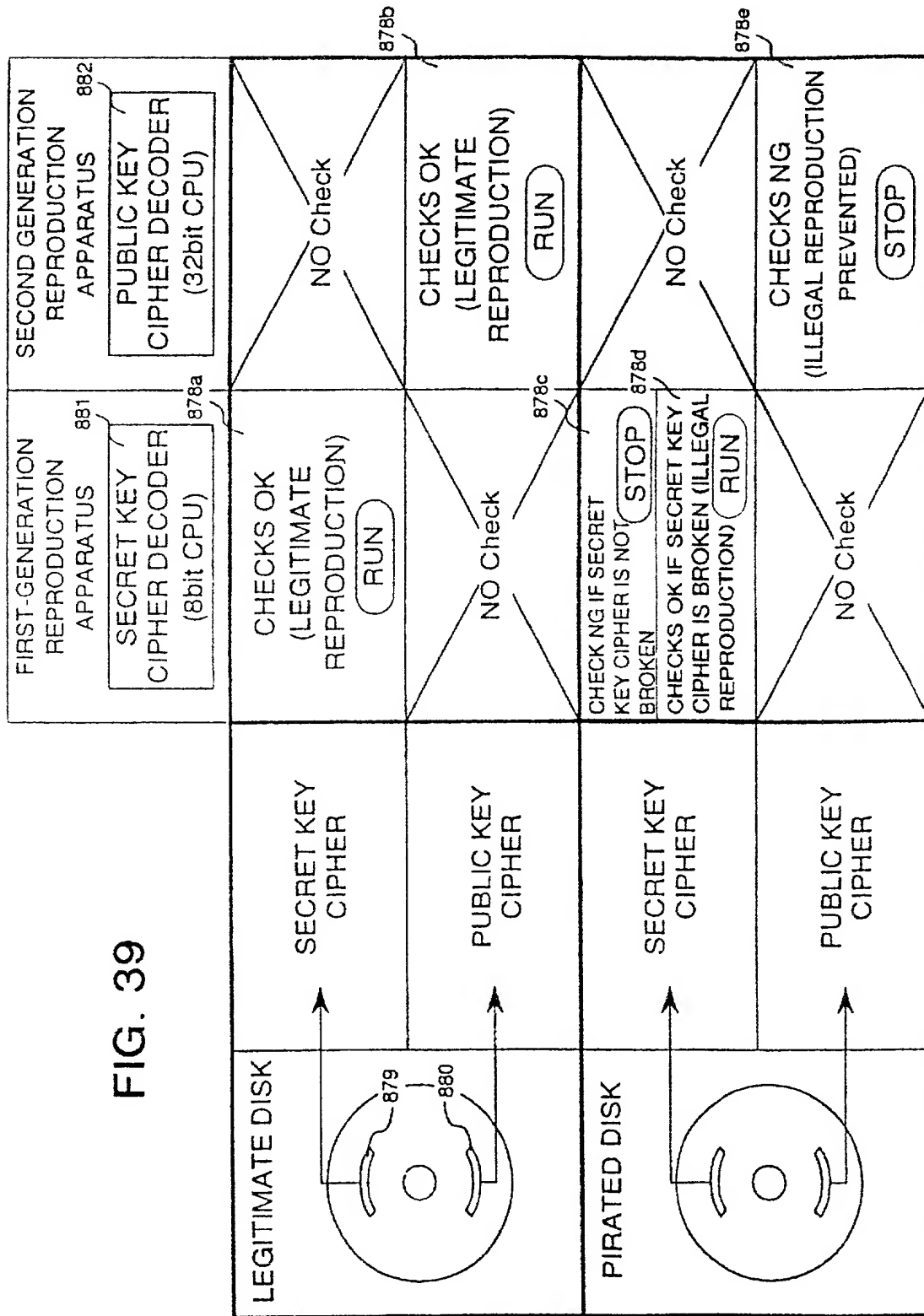


FIG. 38

FIG. 39



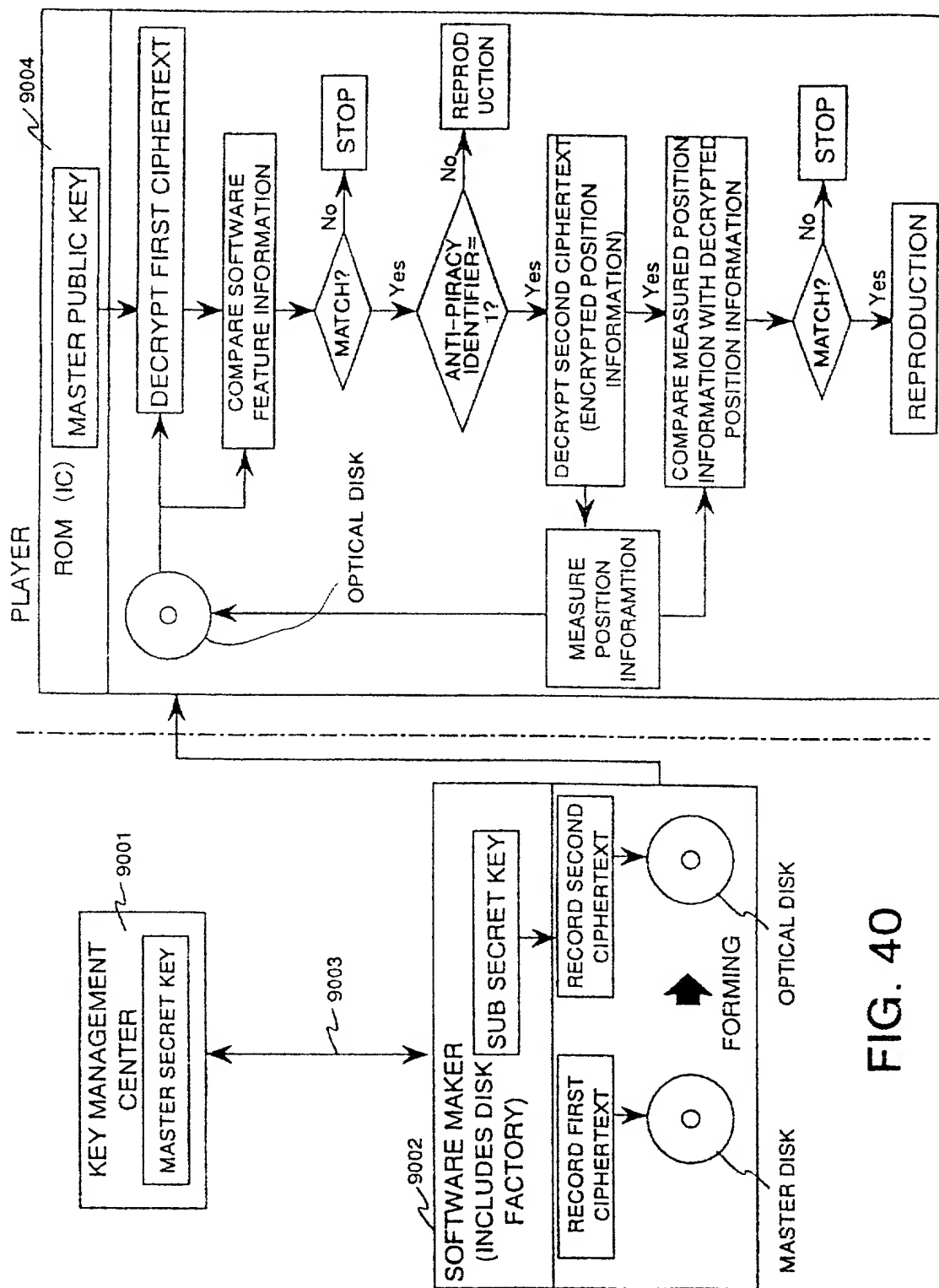


FIG. 40

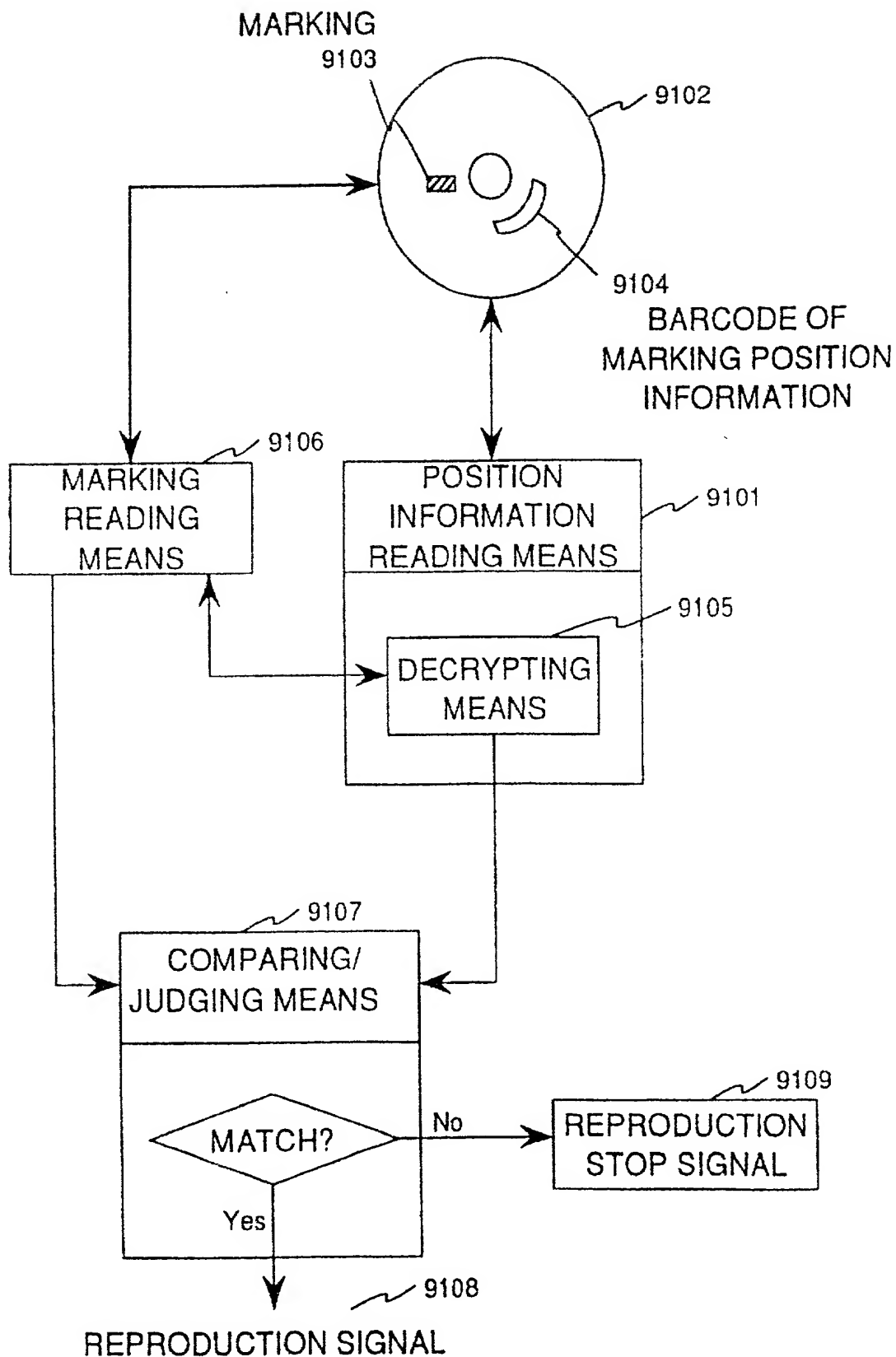


FIG. 41

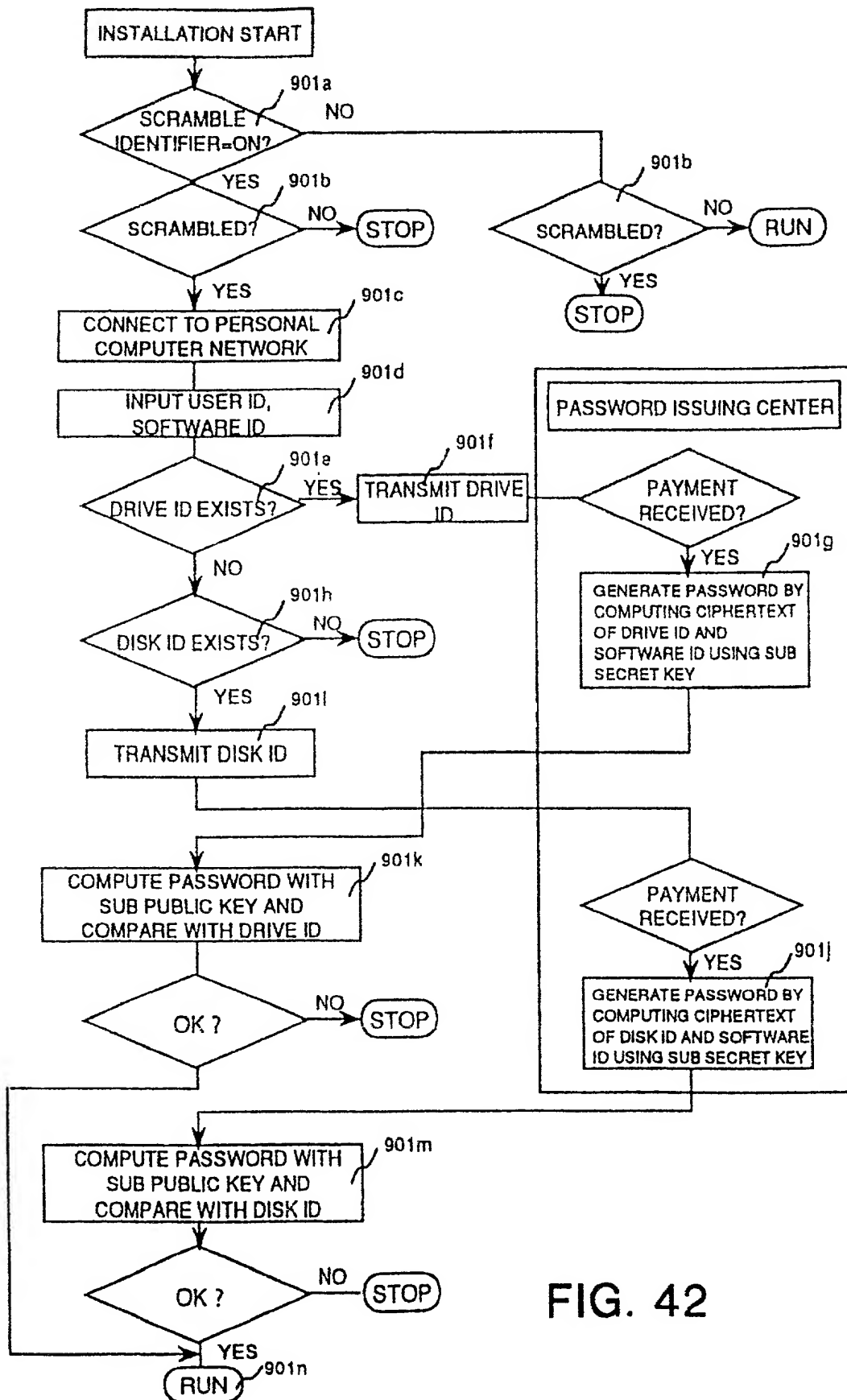


FIG. 42